

AFFIDAVIT OF BRIAN M. CAMPBELL

Brian M. Campbell, being first duly sworn on oath, deposes and says:

1. I serve as Chairman of the Campbell-Hill Aviation Group, Inc, an aviation and economic research and consulting firm located at 700 North Fairfax Street, Alexandria, Virginia.

2. I have a Ph.D. degree from Columbia University in Business Administration (1969).

3. Since 1968 I have served in a variety of roles in the aviation industry, including service as a senior airline executive and several decades of experience as a consultant to airlines, airports, state governments, and the agencies of the federal government (FAA and DOT). My training, experience, and expertise is in airline economics, aviation planning and forecasting, the measurement of the economic impacts of air services on local and regional economies, and the economic analysis of aviation issues. This includes financial, marketing, planning, and operations aspects of airlines, airports, and equipment manufacturers. A detailed description of my and my firm's (Campbell-Hill Aviation Group, Inc.) expertise, experience and representative clients is included as Exhibit A to this affidavit.

4. I and my firm have been asked by the Villages of Bensenville and Elk Grove Village to conduct an analysis and evaluation of the City of Chicago's proposed construction of modifications to O'Hare Airport, including analysis of the Draft (DEIS) and Final (FEIS) Environmental Impact Statements prepared by the FAA for Chicago's proposed construction at O'Hare and including the City of Chicago's pending request from FAA for a 300 million dollar discretionary Airport Improvement Program ("AIP") grant for Phase One of the project, and a request for over one billion dollars in federal Passenger Facility Charge (PFC) authorization for Phase One.

5. Because components of Chicago's proposed construction of modifications to O'Hare Airport have been given different names — e.g., "World

Gateway Program” (“WGP”); “O’Hare Modernization Program” (“OMP”); and “Capital Improvement Program” (“CIP”) — I will refer to Chicago’s proposed construction of modifications to O’Hare Airport as the “full build OMP-Master Plan” which is described in a Master Plan funded by the FAA, prepared by the City of Chicago and published in February 2004. This full build OMP-Master Plan proposal has been selected by FAA in the Final Environmental Impact Statement (FEIS) as “Alternative C”. The initial component of Alternative C is called “Phase One”.

6. My firm’s analysis of these materials prepared and released by Chicago and the FAA is contained in four documents: a) *A Critical Assessment Of The Draft Environmental Impact Statement For The O’Hare Modernization Program (OMP)*(April 6, 2005); *Chicago’s O’Hare Modernization Program Fails To Meet The FAA Tests For Benefit-Cost Justification* (June 6, 2005); *Comments In Regard To: The Federal Aviation Administration's Draft Section 4(f) And Section 6(f) Evaluation For Chicago O'Hare International Airport* (July 5, 2005) and *Presentation to The Federal Aviation Administration In Regard to The City of Chicago Benefit-Cost Analysis In Support of Its Proposed O’Hare Modernization Program* (July 21, 2005).

7. As set forth in Chicago’s Master Plan and the FAA’s Final EIS, Chicago’s proposed modifications will have a highly destructive impact on homes, businesses, and parklands in the communities of Bensenville and Elk Grove Village and on at least one religious cemetery adjacent to O’Hare. Under the Chicago proposal, as now proposed for approval and funding by the FAA, Chicago intends to acquire and destroy homes, businesses and parkland in Bensenville and businesses and parkland in Elk Grove Village, including what Bensenville has advised me is the largest supply of affordable housing in all of DuPage County, Illinois. Under the Chicago proposal, as now proposed for approval and funding by the FAA, Chicago will acquire and destroy the St. Johannes Religious Cemetery. Based on the design and construction schedule put forward by Chicago all of the acquisition and destruction of the homes, businesses,

park lands in Bensenville and Elk Grove and the destruction of St. Johannes Cemetery will occur in Phase One.

I. The Scope of My Analysis and Affidavit

8. I have been asked by Bensenville and Elk Grove Village to conduct an investigation and analysis of the proposed Chicago modifications of O'Hare — both as to the full build OMP-Master Plan and the initial phase of the project known as “Phase One” and to make findings on a variety of issues, including:

A. **Financial Feasibility.** FAA has stated that a necessary element of any alternative selected by FAA to meet the goals set by FAA is that it be feasible. The DOT Inspector General has stated in a recent report that FAA is mandated by federal statute to confirm that there are assured financial resources for both the full build OMP-Master Plan as well as Phase One before issuing any AIP grants or PFC awards for Phase One.

(1) For the reasons I set forth below, I conclude that the full build OMP-Master Plan is not financially feasible and that neither Chicago, nor the FAA, nor the airlines have or can obtain the financial resources needed to build the full build OMP-Master Plan. Therefore, it is virtually certain that all Chicago can build with realistically available resources is some smaller component of the full build OMP-Master Plan. This finding has major implications for the FAA's identification of facilities needed to meet the aviation needs of the Chicago region (a major stated purpose of the FAA) and for the selection of alternatives to meet those needs as well as the FAA's asserted reasons for rejecting certain alternatives.

(2) For the reasons set forth below, I conclude that — based on the available evidence — Chicago cannot finance the completion of Phase One of the full build OMP-Master Plan. This finding also has major implications for Chicago, the FAA and the impacted communities. FAA proposes to allow

Chicago to acquire and bulldoze the homes, businesses and parklands in Bensenville and Elk Grove Village and the destruction of St. Johannes Cemetery before FAA makes federal funding decisions on approximately \$1.4 billion dollars of the 3 billion dollars Chicago says it needs for Phase One. The available facts discussed below demonstrate that FAA is prohibited from awarding or authorizing these funds. Therefore, FAA is proposing to allow Chicago to bulldoze and destroy these resources (and cause millions of dollars of economic losses to these communities) with the virtual certainty that the money will not be available to complete Phase One and that some other alternative will need to be pursued — an alternative which need not involve the destruction of these resources.

- B. **Alternatives.** Are there feasible alternatives which would avoid the destruction of the homes, businesses, parklands in Bensenville and Elk Grove and the destruction of St. Johannes Cemetery? For the reasons discussed below, I conclude that there are a variety of feasible alternatives which can meet aviation demand growth and control delays to acceptable levels — without destroying the homes, businesses, and parklands in the Bensenville and Elk Grove Village and without destroying St. Johannes Religious Cemetery.
- C. **The credibility and associated logic and evidentiary support for FAA's assertions in the FEIS.** Do the reasons provided by FAA in the FEIS for proposing to approve Chicago's proposal for the full build OMP-Master Plan — and for rejecting alternatives which would avoid the destruction of the homes, businesses, and parklands in the Bensenville and Elk Grove Village and the destruction of St. Johannes Religious Cemetery — find support in evidence and logic? Based on the facts and analysis set forth below, I find that the reasons provided by the FAA in the FEIS as justification for FAA's proposed action are neither supported by evidence or logic. Many of the major reasons asserted by

FAA to justify its proposed actions are 1) unsupported claims devoid of any evidentiary or factual support; 2) “non sequiturs” — *i.e.*, statements or assertions that do not follow logically from the asserted premise on which they are based; 3) *ipse dixit* assertions — *i.e.*, assertions put forward as true and accurate simply because FAA says it is so, and 4) statements supported only by sweeping claims of “expertise” without any evidence and reasoning to support the claim.

II Summary of Findings and Conclusions.

9. Based on the analysis and evidence set forth below, the following is a summary of my findings and conclusions:

- A. Construction of the full build OMP-Master Plan is not financially feasible. There are insufficient funds for Chicago to build the full build OMP-Master Plan.
- B. Based on the available evidence, there are insufficient funds for Chicago to build Phase One.
- C. As emphasized by the DOT Inspector General in his July 2005 report, FAA should not fund Phase One without assurance that the funds are available and secure to build the remainder of the full build OMP-Master Plan.
- D. FAA is faced with the situation of wanting to approve a project which federal law prohibits FAA from funding because the project violates statutory mandates. Because of these funding prohibitions (the full build OMP-Master Plan fails several statutory tests), full build OMP-Master Plan will most likely never be constructed. Moreover, because the same statutory funding prohibitions also prohibit the funding of Phase One, FAA’s announced intent to allow Chicago to go forward with the destruction of homes, businesses, and park lands in Bensenville and Elk Grove Village before FAA makes its determination as to funding decisions will likely lead to an unfinished Phase One with enormous damage to the surrounding communities and the religious cemetery.

- E. FAA intends to allow the destruction of homes, businesses, and park lands in Bensenville and Elk Grove Village before FAA makes its determination as to funding decisions for AIP and PFC federal funds for either Phase One or full build OMP-Master Plan. It is my opinion that allowing such destruction before FAA makes its funding decisions is arbitrary and irrational. For the reasons set forth in this affidavit, it is extremely unlikely that FAA can approve the requested federal AIP and PFC funding for either Phase One or the full build OMP-Master Plan. It is my understanding that when making these funding decisions, FAA is under a legal mandate to consider protecting these resources under a variety of federal environmental and religious protection laws. If FAA allows destruction of these resources to proceed before its funding decisions are made, there will be no resources for FAA to protect when it makes its funding decisions.
- F. The alternative proposed by FAA as the preferred alternative –Alternative C (the full build OMP-Master Plan) will neither meet unconstrained demand nor reduce delays over a proper time period of analysis. Based on the 2004 Terminal Area Forecast, the capacity of the full build OMP-Master Plan will be exhausted no later than 2023, and likely sooner. Similarly any asserted delay benefits for full build OMP-Master Plan will be exhausted by 2019. Use of either the 2003 or 2004 TAF show that the capacity of the full build OMP-Master Plan will be exhausted either at the time it opens (depending on what level of delay is deemed acceptable as a measure of capacity) or within a few years after it opens — leading to the necessity for FAA to employ blended alternatives of congestion management and use of other airports to accommodate the so-called “unconstrained” demand even with full build OMP-Master Plan.
- G. There are several alternatives which will allow the servicing of forecast aviation demand and controlling delay while avoiding the destruction of the homes,

businesses, and parklands in the Bensenville and Elk Grove Village and the destruction of St. Johannes Religious Cemetery.

- H. FAA's rationalizations and justifications for the positions it has taken on several of the issues relating to its proposed approval and eventual funding of full build OMP-Master Plan and Phase One suffer from a profound absence of evidence, logic, and objective analysis.

III. The full build OMP-Master Plan Is Not Financially Feasible

10. In conducting my basic analysis of the financial feasibility of the full build OMP-Master Plan, I have accepted (for purposes of the this analysis only) the cost estimate provided by FAA in the FEIS at page 1-54 (Table 1-11) and the funding sources listed by FAA at page 1-55 (Table 1-12). For the reasons stated below, I believe that the cost estimate provided by FAA understates the true cost of the full build OMP-Master Plan, but in order to minimize areas of dispute I have directed my analysis of financial feasibility to the cost estimate of 14.29 billion dollars provided by FAA at page 1-54.

11. Based on the percentages of the sources of funding provided in Table 1-13 of the FEIS, the amounts of money Chicago must raise to pay for full build OMP-Master Plan and the sources of those funds are as shown in Table One of this Affidavit:

TABLE ONE

Project Element	FAA-Chicago cost	AIP entitlement	AIP discretionary	PFC pay as go	PFC Bonds	GARBS	Third Party or Special Facility Financing
OMP	\$7,087,000,000	\$70,870,000	\$566,960,000	\$141,740,000	\$1,417,400,000	\$4,181,330,000	\$708,700,000
WGP	\$2,977,000,000					\$2,322,060,000	\$654,940,000
CIP	\$4,128,000,000		\$247,680,000	\$454,080,000	\$1,238,400,000	\$2,229,120,000	
Total	\$14,192,000,000		\$814,640,000	\$595,820,000	\$2,655,800,000	\$8,732,510,000	\$1,363,640,000

Source: Tables 15 and 16 FAA DEIS, Executive Summary - individual cost amounts based on percentages presented in Table 16—amounts do not reconcile due to rounding

12. The significance and need for a realistic assessment by FAA of Chicago's ability to raise the massive amount of funds identified by FAA as needed to finance the \$14.29 billion cost estimate by FAA has been underscored by the DOT Inspector General in his July 2005 report entitled *Chicago's O'Hare Modernization Program* (Report Number Av-2005-067) in which the Inspector General states:

“The City is projecting that approximately one-third of the OMP will be funded with FAA-approved PFCs and FAA-issued AIP grant funds. FAA will need to verify that the OMP's costs, schedule, and sources of funding are realistic, reasonable, and credible and that any known risks that could affect the cost and schedule of the OMP are fully disclosed and considered.”

IG report at 11-12 (emphasis added)

The Inspector General said further:

“Given the amount of taxpayer dollars at stake in the OMP, it is essential that FAA fulfill its statutory mandate to ensure, among other things, that the use of the PFC revenues is adequately justified. The Department has a **statutory mandate** to ensure that sufficient funding exists to complete a project before committing AIP discretionary funds to that project. Fulfilling these mandates will require FAA to proactively and aggressively analyze the reasonableness and validity of the OMP financial plan. We are making this point because FAA has the legal obligation to assure that the project costs not paid for with AIP grants or PFC revenue will in fact be covered by non-Federal funds (such as airport-issued bonds) before approving the LOI for Phase 1.

Id at 12 (emphasis in bold and underscore added)

13. The Inspector General’s July 2005 report states that the FAA had in its possession the text of the draft IG report since April of 2005 yet the July 2005 FEIS contains absolutely no evidence to indicate that FAA has addressed the concerns raised by the Inspector General.

14. I and my firm have conducted a financial analysis of the \$14.29 billion dollar cost estimate used by FAA in the FEIS and the likelihood that the huge amounts of money indicated in the above Table will be available. For the following reasons, I conclude that the assumed financing for the project — both as to the assumed sources of the funding and the total needed amount of the funding— will not materialize.

15. **The more than 800 million dollars in AIP “discretionary” funds listed in Table One above will not be available.** The federal AIP statute prohibits FAA from awarding AIP “discretionary” funds unless the project benefits exceed the costs. Chicago has submitted to FAA a Benefit-Cost analysis claiming that the benefits of the full OMP exceed the costs of the full OMP and that the full OMP has a benefit-cost ratio of \$1.04 worth of benefits for every \$1.00 of cost — *i.e.*, a benefit-cost ratio of 1.04.

16. An examination of the Chicago benefit-cost analysis (used to produce that benefit-cost comparison of 1.04) discloses that Chicago ignored the very FAA demand

forecast and the very FAA capacity and delay modeling results used by FAA in the FEIS and by Chicago in its Benefit-Cost Analysis . In order to push asserted economic benefits above the huge costs of the full OMP, Chicago assumed that traffic under the full OMP would stay constant at 974,000 operations for the next 20 years after the project opened (2013 to 2032) and that the delay differential between the full build OMP and the existing airport (*i.e.*, the asserted minutes of delay savings claimed by Chicago) that Chicago and the FAA predicted for the year 2013 would stay the same for the entire period 2013-2032.

17. These assumptions (constant traffic level at 974,000 operations and constant delay differential — both for the period 2013-2032) are contrary to the FAA and Chicago's own forecasts of traffic growth and delay. As stated by FAA in the FEIS:

“The commenter appropriately notes that growth in aviation activity at O'Hare will cause delays at the Airport to rise in the future following completion of the OMP (if approved). Simulation results used in the DEIS clearly show that these delays will increase as demand continues to grow beyond 2013.”

FEIS, U.4-526 (emphasis added)

18. Using FAA's own 2002 Terminal Area Forecast (extrapolated over the project opening date plus 20 years required by FAA for benefit-cost justification, *i.e.*, 2013-2032) and the delay differentials represented in the delay curve generated FAA-Chicago modeling (called TAAMs modeling) Campbell-Hill finds that the delay savings will be far less and for a far shorter time than claimed by Chicago. In part this results from the increased aircraft taxi times that will be required because the new runways of the OMP are farther away from the terminals. The detailed analysis by Campbell-Hill is contained in the Campbell-Hill reports and materials: *Chicago's O'Hare Modernization Program Fails To Meet The FAA Tests For Benefit-Cost Justification* (June 6, 2005) and *Presentation to The Federal Aviation Administration In Regard to The City of Chicago Benefit-Cost Analysis In Support of Its Proposed O'Hare Modernization Program* (July 21, 2005). However I have enclosed a chart as Exhibit B to this affidavit which illustrates in simple terms why the

benefits of the full OMP are dramatically less than the costs. Instead of \$1.04 in benefits for every \$1.00 of costs — using Chicago and FAA’s own forecast and delay curve data— the benefits of the full OMP would only be 27 cents for every \$1.00 of cost:

19. Given this enormous discrepancy between the economic benefits of full build OMP and the huge costs of the OMP (only 27 cents of benefit for every dollar of costs) FAA is prohibited by law from awarding AIP discretionary grants for the full build OMP-Master Plan. For this reason, the more than \$800 million in AIP discretionary funds that FAA assumes in the FEIS will be available to pay for a major portion of the cost of the full build OMP-Master Plan will not be available.

20. **The more than 3 billion dollars of Passenger Facility Charge (PFC funds) that FAA assumes will be available to pay for the full build OMP-Master Plan will not be available.** As shown by Table One above, FAA assumes that more than 3 billion dollars of PFC money will be available to pay for the \$14.29 billion cost of full build OMP-Master Plan. As the Inspector General pointed out in his report, FAA is prohibited from authorizing the \$3 billion in PFC funds (or awarding the projected \$70 million in AIP “entitlement” funds shown in Table One) unless there is assurance that there are sufficient funds from other sources to pay the remaining costs of the project. With an \$800 million dollar hole in the project financial plan because of the unavailability of AIP discretionary funds, the federal PFC statute prohibits FAA from authorizing the \$3 billion in PFC funds or the \$70 million shown in Table One for AIP entitlement funds.

21. **The FAA has also assumed PFC funds based on a \$6.00 PFC authorization that has not been approved by Congress and likely will not be approved.** The barebones discussion by Chicago in its Master Plan and the even skimpier discussion of the financing needs in the FEIS assumes that Congress will authorize a 25% increase in the Passenger Facility Charge (PFC) from a current maximum of \$4.50 to \$6.00 per passenger. Based on my work for several of the major airlines in this country and in recognition of the severe financial stresses already on the airline industry, I feel certain that the airline industry

will vigorously oppose any proposed increase in the PFC charge. Failure by Congress to increase the PFC will leave an additional several hundred million dollar hole in the project. (As noted above, FAA is prohibited from authorizing any PFCs — even from the currently authorized \$4.50— unless FAA can demonstrate that there are sufficient funds from other sources to pay for the project).

22. **There is no assurance that the “Majority In Interest” (MII) airlines will agree to underwrite the more than \$8 billion in General Airport Revenue Bond (GARB) debt assumed by FAA in the FEIS to fund the full build OMP-Master Plan.**

In order for the City of Chicago to issue bonds for the full build OMP-Master Plan, Chicago has to receive approval (under the terms of the lease between Chicago and the airlines which use O’Hare) from the “Majority In Interest” (“MII”) airlines, which, given the high percentage of their flights at O’Hare, means United and American. This means that in order for Chicago to sell the more than \$8 billion in General Airport Revenue Bonds (GARBS) assumed by FAA in the FEIS, Chicago must get MII approval from the major O’Hare airlines including United and American. FAA, in the FEIS, points to informal public relations statements of support by American and United for the full build OMP-Master Plan. Yet nowhere does FAA or Chicago provide any evidence of any commitment by American or United (or any of the other airlines serving O’Hare) to approve the issuance of more than \$8 billion of GARBS to pay for the full build OMP-Master Plan. Indeed the only MII approval for GARBS is for a portion of the \$3 billion Phase One (discussed below) and even that commitment is contingent on almost 1.5 billion dollars of PFC and AIP money being available — a contingency which cannot occur because of the problems with AIP and PFC funding for Phase One described below. Based on the economically perilous state of the airline industry over the last several years— and in particular the economic fragility of United and American— it is highly unlikely that these two airlines will support MII approval of the more than \$8 billion in GARBS assumed by FAA. Indeed, it is far more likely that the fragile MII airlines will refuse to give MII approval for the GARB portion of

the full build OMP-Master Plan debt since the other principal sources (AIP and PFC) are likely to be unavailable — raising the amount that would need to be financed by GARBs even further. My conclusion about the reluctance or unwillingness of the MII airlines at O’Hare to commit to the GARB debt for the full OMP is further buttressed by the reported refusal of the MII airlines to approve funding in 2002 of the so-called “World Gateway” terminals — terminals whose multi-billion dollar cost is an integral part of the full build OMP-Master Plan— and terminals without which the passenger traffic that Chicago and FAA claim as benefits of the full build OMP-Master Plan cannot be accommodated.

23. **There is no evidence that any of the airlines serving O’Hare has the financial wherewithal or willingness to afford the more than 1.3 billion dollars in special facility bonds or third party financing for terminals for the full build OMP-Master Plan which the FAA assumes will be available.** As shown in Table One above FAA assumes that more than 1.3 billion dollars “third party” financing will be available. In the Master Plan, this component is also called “special facility” financing.

The City intends to fund selected portions of the planned new terminal facilities at the Airport (i.e., WGP and West Terminal Complex) with third-party financing, which may or may not include special facility debt. This approach is consistent with the City’s use of special facility debt to fund portions of the existing terminal facilities at the Airport.

Master Plan p. VII-29

24. Special facility financing refers to bonds underwritten by the users of specific or “special” facilities at the airport — facilities that are not used by the airlines across the board. An example of a special facility requiring that a single airline underwrite “special facility” debt is the existing United Terminal One at O’Hare which was financed with a special facility bond underwritten by United. According to the Master Plan, Terminal 7 (the western terminal) is scheduled to be used exclusively by United and its alliance partners. Based on United’s default on several hundred million dollars of special facility bonds on the existing United Terminal One, it is highly unlikely that United will be

able to sell special facility bonds and take on the several hundred million dollar cost of the western terminal. Nor has FAA or Chicago provided any evidence that any third party financing sources have demonstrated a willingness and commitment to provide over 1.3 billion dollars for terminal financing.

25. For the reasons stated above I conclude that it is not feasible to finance the \$14.29 billion dollar cost of the full build OMP-Master Plan.

IV. Additional costs required by full build OMP-Master Plan which FAA has failed to include in its cost estimate of costs required for the full build OMP-Master Plan

26. I have reached my conclusion as to the lack of financial feasibility of the full build OMP-Master Plan strictly on the basis of the \$14.29 billion cost estimate contained in the FAA's FEIS. There are additional costs associated with the full build OMP-Master Plan which — while not part of the basis of my conclusion in paragraph 14 above — provide additional evidence of the financial infeasibility and economic irrationality of the full build OMP-Master Plan:

A. The Cost of Airspace Changes. The Inspector General's report stated that "a number of airspace changes need to be made outside of Chicago airspace to sustain the expected benefits of the OMP." Id at p. 21 According to the Inspector General "FAA has not yet finalized the costs and resource requirements for making these airspace changes." Id. Yet it is clear from the Inspector General's report that full build OMP-Master Plan will require that these airspace costs be identified and paid in order to carry the projected traffic. As stated by Congress' Office of Technology Assessment:

"The three segments of the aviation system — airports, ATC facilities, and airspace use procedures — need to be developed in coordination. Piecemeal development could lead to inefficiencies, bottlenecks, and misdirected investment. For example, it would probably be a waste of resources to add runway capacity at an airport if the ATC system cannot be upgraded to handle the additional traffic in that area until several years later."

Office of Technology Assessment (OTA) report
(done for the House Public Works Committee)
entitled *Airport System Development* (OTA-STI-
231 1984) (emphasis added)

B. **Highway Costs.** It is clear from the surface transportation analysis conducted by the FAA that even the increased surface traffic projections for 2018 (only five years after the full build OMP-Master Plan is scheduled) for the traffic to and from the airport will require additional surface road modifications to carry the forecast surface traffic for the airport. At page 5.3-60 of the FEIS FAA states that FAA is “continuing discussions” with Chicago to identify “appropriate mitigation initiatives to address the project related surface traffic for the Build Alternatives”. According to the FAA these “mitigation initiatives” could include payment by Chicago of a “prorated” share of the “total estimated costs of planning, designing, and constructing the required improvements to the significantly impacted roadway segments and intersections.” Id at 5.3-60. Yet these costs are not identified (nor included, as they should have been, in Chicago’s benefit-cost application for AIP funding). Further, the FAA’s use of an end date of 2018 for its FEIS analysis (only five years after the project opens) ignores the even more substantial costs that will be imposed in surface roads and intersections beyond 2018. As discussed below, FAA should have used a project start plus 20 years as the period of analysis. This would allow FAA to coordinate its impact and highway cost analysis with the regional transportation plan which has a 2030 planning horizon and with FAA’s own benefit-cost requirements for AIP funding for the full build OMP-Master Plan which require a start date (here 2013) plus 20 years (2032) as the period of analysis. By using a start date plus 20 years, it is likely that the surface traffic associated with airport demand (as predicted by the extended 2003 or 2004 Terminal Area Forecast) would far exceed the capacities of the existing surface roads and intersections. Payment of the airport’s pro-rata share of the roadway changes needed to meet the airport related surface traffic demand (*e.g.*, expressways) through

the end of the period of analysis (2032) would be a very large cost that has not been identified by FAA.

C. **Capitalized Interest.** We stated in our earlier comments that the interest that Chicago must pay during construction is properly an element of the capital cost of the project. Including capitalized interest adds a billion or more dollars to the capital cost of the full build OMP-Master Plan. (See my discussion, *infra*, of FAA assertions).

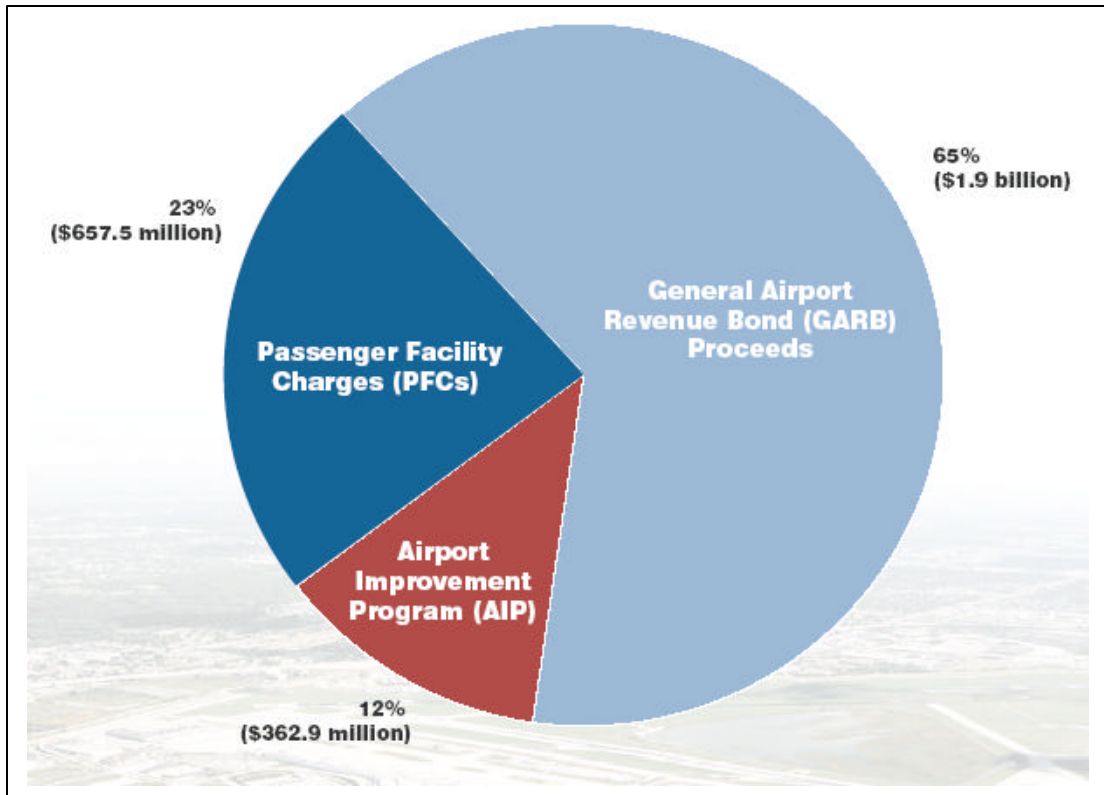
D. **Lack of a Detailed Line Item Quantity and Unit Cost Estimate for the full build OMP-Master Plan with appropriate contingency costs.** The Inspector General emphasized that the OMP's cost estimates be "realistic, reasonable, and credible." Id at 3. Compounding the problem of the current FAA estimate is the fact that there is no detailed current 2005 line item and quantity and unit cost estimate for the project. Instead FAA has provided a hodgepodge of disorganized piecemeal estimates predicated on a cost analysis performed in 2003. The Inspector General emphasized that cost estimates performed several years ago are unreliable. Given the very large rise in the cost of raw materials (*e.g.*, steel) mentioned by the Inspector General and the massive rise in fuel costs, generic adjustments for general inflation are highly inaccurate and biased to the low side. For a project approval and FAA funding on a project that the FAA itself acknowledges will cost \$14.29 billion dollars, fundamental economic prudence dictates that a current 2005 line item and quantity and unit cost estimate (with a significant contingency cost component) be prepared for the project to verify — in the Inspector General's words — that the costs are "realistic" and "credible".

V. **The Phase One Project is not Financially Feasible.**

27. It is equally obvious that the Phase One project is not financially feasible. Neither Chicago nor FAA has demonstrated that sufficient financial resources are committed to insure completion of Phase One. As the Inspector General's report

emphasized, FAA has a statutory mandate (and a corresponding statutory prohibition) to withhold AIP and PFC funding unless assurances of complete funding are in place.

28. Chicago has told FAA that Phase One will cost \$2.9 billion dollars and that the sources of funding for the Phase One project are as follows:



29. The reasons why I conclude that Phase One is not financially feasible and why sufficient funds have not been committed to assure completion of Phase One are as follows.

30. **The \$300 million dollars in AIP “discretionary” funds Chicago says it needs are not available and FAA is prohibited from awarding the \$300 million dollar AIP discretionary grant for Phase One because the benefits are far less than the costs.** Of the \$362 million Chicago says it will obtain from AIP funds, Chicago seeks \$300 million from “discretionary” AIP funding and approximately 60 million from AIP “entitlement” funds. As discussed above, the federal AIP statute prohibits FAA from awarding AIP “discretionary” funds unless the project benefits exceed the costs.

31. Chicago has submitted to FAA a Benefit-Cost analysis claiming that the benefits of Phase One are \$2.13 for every \$1.00 of cost or a benefit cost ratio of 2.13.

32. However, an examination of the Chicago benefit-cost analysis (used to produce that benefit-cost comparison of 2.13 for Phase One) discloses that Chicago ignored the very FAA demand forecast and the very FAA capacity and delay modeling results used by FAA in the FEIS.

33. In order to push asserted economic benefits above the cost of Phase One , Chicago assumed that traffic under Phase One would stay constant at 974,000 operations for the next 20 years after the Phase One project opened (the initial runway of Phase One is scheduled for 2007 and the full Phase One to open in 2009 leading to a planning and analysis horizon of 2028) and that the delay differential between the Phase One and the existing airport (i.e., the asserted minutes of delay savings claimed by Chicago) that Chicago and the FAA predicted for the year 2009 would stay the same for the period 2009-2028. These assumptions (constant traffic level at 974,000 operations and constant delay differential — both throughout the period 2009-2028) are contrary to the FAA and Chicago’s own forecasts of traffic growth and delay and they are contrary to any sensible real life analysis of the future and to the stated requirements in the FAA’s BCA Guidance.

34. Using FAA's own 2002 Terminal Area Forecast (extrapolated over the project opening date plus 20 years required by FAA for benefit-cost justification, i.e., 2009-2028) and the delay differentials represented in the delay curve generated FAA-Chicago modeling for Phase One (called TAAMs modeling) Campbell-Hill finds that the travel time savings for Phase One will be far less and for a far shorter time than claimed by Chicago. In part this results from the increased taxi times that will be required because the new runways of the OMP are farther away from the terminals. The detailed analysis by Campbell-Hill is contained in the Campbell-Hill reports and materials: *Chicago's O'Hare Modernization Program Fails To Meet The FAA Tests For Benefit-Cost Justification* (June 6, 2005) and *Presentation to The Federal Aviation Administration In Regard to The City of Chicago Benefit-Cost Analysis In Support of Its Proposed O'Hare Modernization Program* (July 21, 2005).

35. However the chart attached to this affidavit as Exhibit C illustrates in simple terms why the benefits of the full Phase One are dramatically less than the costs. Instead of \$2.13 in benefits for every \$1.00 of costs — using Chicago and FAA's own forecast and delay curve data— the benefits of the Phase One would less than one cent for every \$1.00 of cost. The area marked in green is where Phase One (based on Chicago and FAA's own modeling) would have a lower average travel time than the existing airport. The area marked in red is where (because of rapidly rising delays with Phase One and higher taxi times) Phase One would have higher average travel time than the existing airport.

36. Given this enormous discrepancy between the economic benefits of Phase One and the cost of Phase One (less than 1 cent of benefit for every dollar of costs) FAA is prohibited by law from awarding AIP discretionary grants for Phase One. For this reason, the \$300 million in AIP discretionary funds that FAA assumes in the FEIS will be available to pay for a major portion of the cost of the Phase One will not be available.

37. **The more than \$1 billion dollars Chicago is seeking in PFC authorizations for Phase One will not be available.** Chicago is seeking more than \$1

billion in PFC authorization for Phase One (several hundred million dollars of this authorization is to pay interest on the PFC bonds because the income stream for these PFCs will not be available for many years.) As discussed above and noted by the Inspector General in his report, FAA is prohibited by statute from authorizing PFC funds unless the applicant can show that sufficient funding is available from other sources to pay for the remainder of the project. Since it is clear that FAA is prohibited from awarding any AIP discretionary funds for Phase One, FAA will necessarily be prohibited from awarding the PFCs unless Chicago can demonstrate that sufficient funds are available from other sources. Chicago has made no such demonstration. Similarly the approximately 60 million dollars Chicago seeks in AIP “entitlement” funds for Phase One will equally be prohibited because of the funding shortfall.

38. **The Lima Lima Taxiway shortfall.** Correspondence between Chicago and the FAA indicates that Chicago has removed the Lima Lima taxiway and its associated costs from the Phase One project. FAA does not discuss the Lima Lima issue in the FEIS but news media reports have reported the cost of Lima Lima at \$200-\$250 million. Chicago’s entire benefits analysis and the entire modeling of Phase One by FAA in the FEIS to assess Phase One’s impact and performance is predicated on the Lima Lima taxiway being in place. If FAA wishes to fund Phase One with either AIP or PFC funds, FAA must demonstrate that sufficient funds to pay for Lima Lima are in place and should require the preparation of a new cost estimate for Phase One and a new benefit-cost analysis including the added cost of Lima Lima. Without that funding assurance for Lima Lima in place, FAA will be prohibited by statute from providing either AIP funds or PFC funds.

39. **The Majority In Interest Airline GARB commitment for Phase One is contingent on all other sources of funding being secure.** As noted by the Inspector General’s report, the airlines have not provided a MII commitment and approval for the full build OMP-Master Plan and the airlines’ MII commitment to General Airport Revenue Bonds for a portion of Phase One is contingent on the other sources of money for Phase One

being available and assured. Since, as demonstrated above, federal statutes prohibit FAA from awarding AIP and PFC funds, and since there is an additional \$200-\$250 million shortfall with the Lima Lima taxiway (there is no evidence that the airlines have provided additional MII approvals to pursue GARB funding for Lima Lima), there necessarily is no assurance that the airlines GARB commitment for Phase One will materialize. Indeed, given the express contingency limitation of the airlines MII approval of Phase One, the airline commitment does not exist without the assurance of these other funding sources.

40. For the reasons stated above I conclude that it is not feasible to finance the \$2.9 billion (or more depending on the status of the Lima Lima taxiway) cost of Phase One.

VI. FAA's Unsupported Assumptions regarding Financial Feasibility

41. The Inspector General warned FAA that it could not and should not make assumptions and conclusions that had no basis in fact and warned FAA that bald reliance on FAA's self-declared "expertise" should not and will not be accepted by the courts. Yet it is just such reliance on bald unsupported assumptions and "expert" opinion that marks FAA's bare bones conclusion (based more on wishful thinking than on any evidence) that the full funding of these massive costs for full build OMP-Master Plan and Phase One will be available.

42. As set forth above, I and Campbell-Hill have provided specific facts as to why the full build OMP-Master Plan and Phase One have fatal financial feasibility problems. At no place in the FEIS does FAA address any of these very substantial and most likely fatal financial problems. Instead FAA in the FEIS simply parrots unsupported assumptions and conclusions which have no evidentiary foundation:

“...FAA has no reason to believe that the City's financial plan cannot be implemented as generally presented in the ORD Master Plan.”

FEIS 1-57

“FAA has concluded that it is reasonable to assume that, based upon the impact O'Hare has on the Chicago region, as well as

the NAS, and the benefits to the regional economy, there will be sufficient funds to complete the City's proposal, if approved."

Id. (emphasis added)

43. FAA's sole justification for these bald unsupported assumptions and conclusions is that earlier bonds issued by the City to pay for a portion of Phase One were given "investment-grade" ratings and are thus an indication that the financial community considers Chicago's financial plan as reasonable. (FEIS at 1-57). But as Campbell-Hill pointed out in its April 6, 2005 report, (page 59, Section 3.3.3) the prospectuses for those bond issues claimed benefits (benefits which cannot be substantiated) for the entire full build OMP-Master Plan without ever revealing the true costs of the full build OMP-Master Plan and without revealing the problems that the full build OMP-Master Plan and Phase One have with AIP and PFC financing. Indeed, these prospectuses claimed that OMP would produce a 70 percent reduction in delays (which FAA's own modeling shows is not the case and FAA's own modeling shows that rising delays under Phase One and full build OMP-Master Plan will quickly exhaust any delay savings). Similarly, the prospectuses claimed that the full build OMP-Master Plan would meet the forecast demand through the year 2030 when we know that the full build OMP-Master Plan will run out of capacity shortly after it opens. FAA certainly cannot assert that these earlier bond prospectuses revealed to the investment community all of the material costs of the full build OMP-Master Plan, the financing problems with AIP and PFC funding, and the rapid rise in delays that will be experienced in both Phase One and full build OMP-Master Plan.

VII. The Implications of the Facts Demonstrating that neither the full build OMP-Master Plan nor Phase One are financially feasible.

44. The facts set forth above in my analysis demonstrate with a high degree of probability that Chicago cannot assemble the financial resources necessary to build the \$14.29 billion (the amount FAA admits to, it is likely more) full build OMP-Master Plan.

Nor has Chicago demonstrated that it can assemble the resources needed to build the \$2.9 billion Phase One project.

45. The lack of financial feasibility for both full build OMP-Master Plan and Phase One has major implications on the consideration of aviation needs, adverse impacts and destruction of homes, businesses, parklands and religious cemeteries, and on the availability of ORD alternatives to avoid this destruction.

46. **The Implications of the Financial Infeasibility of the full build OMP-Master Plan** Central to the FAA's proposed action in approving the full build OMP-Master Plan is FAA's categorical rejection of what FAA calls "blended alternatives". As described in more detail below, a "blended alternative" is simply using the existing airport (or some smaller added increment of runways of lesser scope than full OMP) in combination with demand management and the use of other airports. Blended alternatives have historically been widely used by FAA in metropolitan areas across the country and are currently in use or proposed for use in major urban centers nationwide. FAA currently uses a blended alternative (*i.e.*, demand management plus the use of other airports) at O'Hare, Reagan National, and New York's LaGuardia and is proposing blended alternatives (*i.e.*, a physical airport smaller than required to accommodate the so-called "unconstrained" demand with some form of a mechanism to cause the use of other airports) at Los Angeles LAX, and Boston's Logan. Similarly, based on forecast demand at Midway and the capacity analysis described by FAA in the FEIS, FAA will be required to implement a blended alternative at Midway within a very few years. Indeed, in the last consideration of major expansion at O'Hare, Chicago and the FAA in 1984 expressly selected a blended alternative at O'Hare to avoid damage to surrounding communities.

47. FAA implicitly acknowledges — and the Inspector General expressly emphasizes — that if the full build OMP-Master Plan is not built (*e.g.*, because the project cannot be funded), some form of blended alternative will be required at O'Hare. Once that fact is accepted, there are a variety of blended alternatives at O'Hare that can meet demand,

control delays to desired levels, and avoid destruction of the homes, businesses, parklands and religious cemeteries in the surrounding communities.

48. The FAA's unsupported assumption that the full build OMP-Master Plan is financially feasible— *i.e.*, that sufficient financial resources are or will be available to complete the full build OMP-Master Plan — is central to the FAA's conclusions: i) that the proposed modifications will meet the FAA's stated purpose and need; ii) that there are no alternatives to the proposed modification that would avoid the destruction:

- A. FAA asserts that the full build OMP-Master Plan is needed to (and will) meet the stated purpose and need of meeting all “unconstrained” future traffic demand at O'Hare (an assertion that is in error as discussed below).
- B. On the basis of that assertion FAA categorically rejects the use of “blended alternatives” (alternatives which combine the use of a lesser scale O'Hare with demand management and use of other airports) on the argument that only alternatives at O'Hare which meet the “unconstrained” demand will be considered; and since blended alternatives do not meet the “unconstrained” demand, these alternatives are rejected.

49. Assuming *arguendo* that full build OMP-Master Plan will meet unconstrained demand (as discussed below, the data strongly contradict FAA's assertion that full build OMP-Master Plan will meet the unconstrained demand), if there is insufficient funding for the massive \$14.29 billion full build OMP-Master Plan, FAA, of necessity will be compelled to use a “blended alternative”. The Inspector General's report emphasizes this point. Once the inevitable and unavoidable need to use a “blended alternative” is acknowledged, then FAA must necessarily consider a variety of blended alternatives, including blended alternatives that either use the existing airport (*i.e.*, without additional runways) or blended alternatives using other runway variants (of lesser size at O'Hare than full build OMP-Master Plan) that could meet the demand while avoiding the destruction of homes, businesses, parklands and the St. Johannes Religious Cemetery.

50. The Inspector General recommended that FAA confirm that the financial resources for the entire full build OMP-Master Plan be certain before proceeding with the funding of Phase One. If FAA is unable to confirm the availability of the full funding for full build OMP-Master Plan, FAA must necessarily consider blended alternatives for Phase One as well as other blended alternatives. FAA has rejected all blended alternatives, including a blended alternative for Phase One. If FAA is unable to confirm the availability of the full funding for full build OMP-Master Plan, FAA should be required to explore these other blended alternatives before allowing the destruction of homes, businesses, parklands and the St. Johannes Religious Cemetery.

51. **The Implications of the Fact That Phase One is Not Financially Feasible.** FAA agrees that Phase One will not meet the FAA's stated need to accommodate unconstrained demand and implicitly acknowledges that if only Phase One is built (or anything short of full build OMP-Master Plan) FAA will be required to use a blended alternative at O'Hare.

52. But FAA refuses to examine Phase One in comparison to other existing and potential blended alternatives at O'Hare on two central assertions:

- A. FAA asserts that only full build OMP-Master Plan will meet "unconstrained demand" at O'Hare and that meeting the so-called "unconstrained demand" for forecast operations is an unconditional requirement of any alternative. (As discussed below full build OMP-Master Plan does not meet unconstrained demand and even full build OMP-Master Plan will need to use a blended alternative. However, for purposes of the financial feasibility issue, I have accepted *arguendo*, this assertion)
- B. FAA's blind unsupported claim — without addressing any of the fatal financial flaws described above — that the \$14.29 billion dollars will somehow materialize.

53. Based on this bizarre reasoning, FAA intends to proceed with approving the construction of Phase One — and the associated destruction of homes, businesses, parklands, and the destruction of St. Johannes Cemetery — on the assertion that Phase One is simply a part of the (in FAA’s mind) inevitable construction of full build OMP-Master Plan. FAA simply refuses to consider the implications of Phase One (if only Phase One is constructed) or some form of O’Hare configuration less than full build OMP-Master Plan as being a potential reality).

54. But there are additional implications for the lack of financial resources to build Phase One. Without having the money to build Phase One in place (and likely not being able to assemble the money for the reasons stated above) FAA is intending to allow Chicago to bulldoze and destroy the homes, businesses, parklands, and the destroy St. Johannes Cemetery before FAA conducts the analysis and reaches a conclusion on the availability of funds to build the Phase One project. FAA’s proposed action creates the distinct likelihood that Chicago’s bulldozers will destroy these resources only to find later that the money is not there to complete the Phase One project.

55. It is my opinion that FAA’s proposed action to allow the acquisition and destruction of these properties before FAA determines that the money to build Phase One is available is arbitrary and irrational. Without the AIP, PFC and GARB funds discussed above and required for Phase One, these homes, businesses, parklands and religious cemetery will have been destroyed for no purpose.

56. It is also arbitrary and irrational for FAA to allow the destruction of homes, businesses, parklands and the St. Johannes Religious Cemetery until it determines if there is sufficient money available for the full build OMP-Master Plan. As discussed above, if there is not sufficient money to construct the full build OMP-Master Plan, then FAA will necessarily (as pointed out by the Inspector General) be compelled to investigate the use of blended alternatives — something FAA has refused to do to this date. Once FAA examines blended alternatives, FAA has already conceded that there are blended alternatives that will

not destroy the homes, businesses, parklands and religious cemetery that Chicago proposes to destroy (with FAA funding) for Phase One.

VIII. The Three Variables That FAA Has Used To Support its Decision To Approve full build OMP-Master Plan.

57. FAA has used three principal variables in reaching its conclusion that Chicago's full build OMP-Master Plan project will meet the "unconstrained" forecast demand at acceptable levels of delay:

- A. **The Forecast Demand.**
- B. **The Acceptable Level of Delay**
- C. **The Time Period of Analysis.**

Changes or manipulation of any one of these variables — either alone or in combination— can and have lead to dramatic misstatements about the capacity of either Phase One or the full build OMP-Master Plan, and the time at which that capacity is exhausted, as well as to dramatic misstatements and erroneous conclusions about alternatives to Phase One and full build OMP-Master Plan.

58. The **Forecast Demand** is a key variable in determining the size and configuration of the facilities needed to meet what is called "unconstrained" demand and is also key in determining when the capacity of a proposed facility will be exhausted. If the Forecast Demand is larger and grows faster in one forecast as compared to another forecast, the date at which the proposed facility's capacity is exhausted will be substantially different. If the capacity is exhausted at an earlier date, then the alternatives that FAA must consider change considerably. As discussed below, the FAA's failure to use a more current Forecast Demand (e.g., the 2003 or 2004 Terminal Area Forecast (TAF)) instead of the 2002 Terminal Area Forecast, has a major impact on the ability of the proposed full build OMP-Master Plan and Phase I airfields to meet future demand. Use of either the 2003 or 2004 TAF shows that the capacity of the full build OMP-Master Plan will be exhausted either at

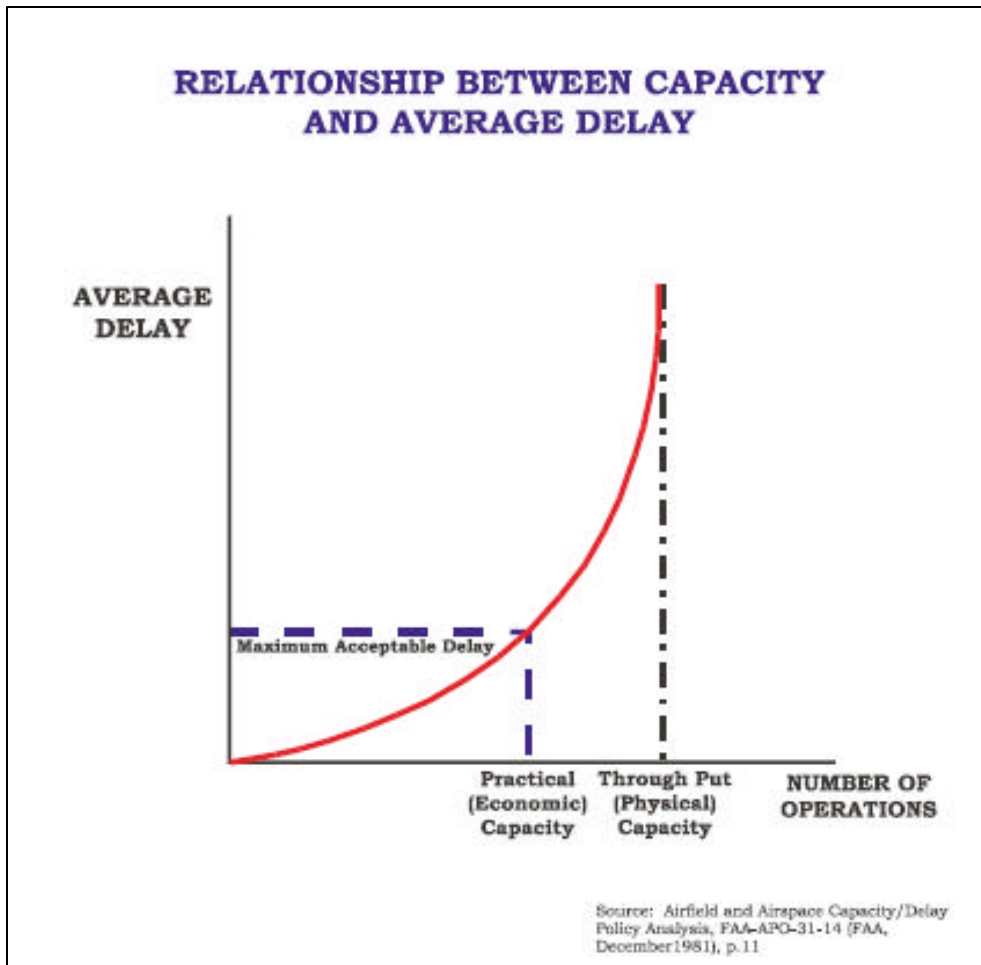
the time it opens (depending on what level of delay is deemed acceptable as a measure of capacity) or within a few years after it opens — leading to the necessity for FAA to employ blended alternatives of congestion management and use of other airports to accommodate the so-called “unconstrained” demand even with full build OMP-Master Plan.

59. FAA in the FEIS categorically rejects the use of blended alternatives but the fact that FAA will be required to use a blended alternative even with full build OMP-Master Plan means that FAA can certainly consider other blended alternatives that would not require the destruction of the homes, businesses and parklands in Bensenville and Elk Grove Village and the destruction of St. Johannes Cemetery

60. The **Acceptable Level of Delay** is a second key determinant in the capacity of an existing facility. To determine when the capacity of a proposed facility will be exhausted, FAA uses a delay simulation model to calculate what the level of delay will be at a given level of **Forecast Demand**. Obviously, the higher level of delay one deems to be acceptable, the higher the capacity (*i.e.*, the number of operations) for a given facility.

61. In discussions of what is an Acceptable Level Of Delay, the FAA uses the term “Average Annual All Weather” Delay or “AAAW”. The values given for Average Annual All Weather Delay can be deceptive in that a given value for AAAW delay will often mask a much higher average delay in bad weather. For example, a 14.2 minute AAAW delay predicted by FAA for Phase One in the year 2013 (using the low 2002 TAF forecast) predicts that average bad weather delays will be in the 70-90 minute range. As discussed below, FAA has deliberately used a very high and misleading number as to acceptable levels of delay for Phase One and full build OMP-Master Plan – 15 minutes AAAW — thus overstating the capacity of these facilities. However, FAA refuses to disclose the level of “bad weather” or IFR delay that will occur when full build OMP-Master Plan reaches 15 minutes AAAW, thereby ignoring the issue of whether IFR delays are proportionally lower with OMP.

62. FAA and the U.S Department of Transportation have made a number of statements about what the acceptable level of delay and the practical capacity of an airport. The analysis of delay and capacity (including practical capacity) is governed by a capacity delay curve published by the FAA:



This chart applies to every airport — including the existing O’Hare and the proposed Phase One and full build OMP-Master Plan.

63. The key variables in examining this chart in the context of any airport are:
- A. **The level of delay that one deems acceptable (the higher the delay that is acceptable the higher the practical capacity).** For example if one says that the acceptable delay (*i.e.*, the proxy for practical capacity) is 15 minutes you can get more traffic through the airport than if you say the acceptable level of delay is 4 or 6

minutes. Which level one selects depends upon the level of delay one finds acceptable and the consequences (*e.g.*, cancellations, chaotic conditions, see discussion by USDOT below) of that level of delay. In economic terms, the level of acceptable delay one selects is the “**supply**” side of the equation. It controls how much traffic can go through the airport.

- B. The Forecast Demand and the timing of that demand, *i.e.*, the year that the traffic volume rises to the level that the delay curve turns vertical.** How soon the airport facility (in this case Phase One or full build OMP-Master Plan) runs out of capacity and reached the assumed level of acceptable delay depends upon the forecast demand and the year at which the forecast demand produces that delay level.

64. The following is what FAA and DOT and Chicago have said about the level of average annual delay that is either “acceptable” or “tolerable.

1998-2002 NPIAS

“Experience shows that delay increases gradually with rising levels of traffic until the practical capacity of an airport is reached, at which point the average delay per aircraft operation is in the range of 3 to 5 minutes. Delays increase rapidly once traffic demand increases beyond this level. An airport is considered to be congested when average delay exceeds 5 minutes per operation. Beyond this point delays are extremely volatile, and a small increase in traffic, adverse weather conditions, or other disruptions can result in lengthy delays that upset flight schedules and impose a heavy workload on the air traffic control system.”

FAA *National Plan for Integrated Airport Systems* (NPIAS) (1998-2002), p. 10 (emphasis added).

2005-2009 NPIAS

“The Annual Service Volume (ASV), at a particular level of delay, is used to measure airfield capacity at individual airports. Traditionally, a delay of four to six minutes per aircraft operation is used in ASV calculations. The relationship between aircraft operations and delay is non-linear, and often exponential. Experience shows that airfield delay increases gradually with rising levels of traffic until a certain level is

reached. Thereafter, the delay rises more rapidly with increased traffic. For larger airports, it is our observation that the onset of the more rapid growth in delay often occurs when delay is between 4 and 6 minutes per aircraft operation.”

NPIAS (2005-2009) p. 12 (emphasis added)

The City of Chicago March 2004 LOI Application

“According to the *FAA’s National Plan of Integrated Airports Systems (NPIAS)*, *March 1999*, and the *BCA Guidance*, an airport is at practical capacity when the average annual delay reaches a range of 4 to 6 minutes per operation”

Chicago March 2004 LOI Application, page II-14 (emphasis added)¹

The 1995 DOT HDR Study

There has long been a recognition that — despite the fact that 4 minutes AAW is the desired goal — in actuality several major airports are operating at higher levels of AAW delays. This reality was recognized in the DOT’s 1995 High Density Rule Report which spoke of the limits of “tolerable” AAW delay:

The 1995 DOT HDR report states:

There are no defined criteria that delineate acceptable versus unacceptable delays. **FAA has historically regarded up to four minutes of AAW delay per operation to be an "acceptable" level.** At some airports, however, this level of delay is exceeded on a regular basis. At the largest airport facilities, AAW delays in excess of six minutes per operation are routinely experienced. Growth in delays to higher levels has and will continue to occur at airports with increasing operations, at least until new capacity can be added.

In the absence of specific acceptability criteria for delays, a level-of-service scale has been developed to describe the operational conditions generally associated with increasing AAW delays. This scale provides a means to gauge the extent to which delays ***will be tolerated*** rather than accepted. On the basis of AAW delay, **operational conditions at large hub airports** could be characterized as follows:

- 0 to 4 minutes of delay per operation: efficient overall operations; delays limited to the most extreme weather conditions.

¹ In the 1990s Chicago made the following statement: “The practical capacity of the airfield will be defined as the maximum level of average all-weather throughput achievable while maintaining an acceptable level of delay. * * *Ten minutes per aircraft operation will be used as the maximum level of acceptable delay for the assessment of the existing airfield’s capacity... This level of delay represents an upper bound for acceptable delays at major hub airports . . .”(Landrum & Brown January 1993 Demand Forecast Analysis for the City of Chicago)

- 4 to 6 minutes of delay per operation: less *efficient* overall operations; limited peak hour VFR delays along with IFR delays experienced in both moderate and extreme weather conditions.
- ***6 to 8 minutes of delay per operation: increasing VFR delays in peak hours; increasing delays and eroding operational reliability in IFR conditions; high sensitivity to operational anomalies.***
- ***8 to 10 minutes of delay per operation: increasing VFR delays in peak hours with translation to shoulder hours in all but optimum conditions; high delay in IFR with resulting flight cancellations.*** -
- ***Over 10 minutes of delay per operation: VFR operations experience increasing delays in peak periods and shoulder hours in all but optimum conditions; very high delays in IFR resulting in extensive flight cancellations.***

...[W]hen the AAW delay per operation reaches **6 minutes**, project planning, engineering and design of capacity improvements should be actively pursued. When AAW delay reaches **eight minutes**, implementation of capacity improvements should be underway.

1995 DOT HDR Report, Technical Supplement
3, page D-2 (emphasis added in bold
underscore and italics)

65. For the O'Hare FEIS, FAA has refused to identify the Acceptable Level of Delay for full build OMP-Master Plan but stated that traffic growth would stop when AAW delay reached 15 minutes AAW:

“A thorough evaluation of analytical data that examines the relationship between aircraft delay and airport capacity indicates that market forces will likely constrain aircraft operations at O'Hare when average annual delay reaches approximately 15 minutes per operation. Selection of this level of delay as the metric to “cap” aircraft operations in a constrained (i.e., no action) environment is consistent with the FAA's Benefit-Cost Analysis guidance, historical data collected from O'Hare and other highly-delayed U.S. airports, and precedents set in other recent EIS efforts' supporting capacity-enhancing projects at representative large airports.”

FEIS Appendix B, B-22

66. FAA has not provided any “analytical data” — let alone any document containing a “thorough evaluation” of that “analytical data” to support its statement that traffic will stop growing at 15 minutes AAW, as opposed to some lesser AAW value. FAA has cited no evidence from “precedents” in other “recent EIS efforts” supporting capacity-enhancing projects at representative large airports” that support this statement of 15 minutes as a cap on operations. Nor, has FAA produced any data and statistical analysis (apart from FAA’s *ipse dixit* statement) showing that the values FAA has modeled at 15 minutes in its FEIS preparation have a valid statistical correlation with any historical data at O’Hare or elsewhere.

67. Every other airport cited by FAA stated that acceptable delay limits — *i.e.*, the measure of acceptable capacity — was ten minutes or less – nowhere near the 15 minute ceiling used by FAA in the O’Hare EIS:

The Miami International Airport EIS1 used 10 minutes per operation of average annual delay as a measure of acceptable delay, citing it as a “national standard.” The Denver International Airport EIS2 used 6 minutes per operation of average annual delay. ... At Boston Logan, delays averaged 7.86 minutes per operation over this period, and it was concluded that actions to reduce delay were required as delays approached 8 minutes per operation.

68. **The Time Period of Analysis** is the third variable that is critically important. Selecting too short a Time Period of Analysis can produce a very misleading picture of the ability of a given facility to meet the aviation demands of the region or even the aviation demand projected for a specific facility. Too short a Time Period of Analysis also creates a false and misleading benefit/cost picture. Similarly, because delays grow as demand grows over time, selection of too short a Time Period of Analysis can produce a very misleading picture of the ability of the facility to reduce delays. In FAA’s planning grant to Chicago to analyze the impacts and capacity and delays associated with the full build OMP-Master Plan, FAA wisely required a **Time Period of Analysis** to the year 2030:

“It is anticipated that planning activity levels of 2015 and 2030 based on the most recent TAF will be identified at the basis of this effort”

March 7, 2002 FAA grant to Chicago, Scope of Work at p. 2 (emphasis added)

Similarly, in Chicago’s application for the AIP discretionary money for full build OMP-Master Plan, Chicago is required by the FAA to use a **Time Period of Analysis** of the date the project is scheduled to open (2013) plus 20 years – or a Time Period of Analysis from the opening of the project to the year 2032.

69. In contrast to the Time Period of Analysis of 2030 directed by FAA in its multi-million dollar planning grant for OMP, and in contrast to FAA’s requirement for federal AIP discretionary funding for OMP to use a Time Period of Analysis of project start plus 20 years (*i.e.*, 2013 to 2032), FAA in the FEIS only used a Time Period of Analysis of 5 years (*i.e.*, from 2013-2018). By using this very short 5 year Time Period of Analysis FAA reached misleading and incorrect conclusions about: 1) the ability of the full build OMP-Master Plan to meet the “unconstrained” forecast demand, 2) the need for and availability of blended alternatives that will be required to be used with full build OMP-Master Plan and which blended alternatives can be used with lesser scaled development at O’Hare, and 3) the impacts of the project.

IX. FAA’s Manipulation of the Three Variables (Forecast Demand; Acceptable Level of Delay; and Time Period of Analysis) To Reach Incorrect and Misleading Conclusions About full build OMP-Master Plan.

70. FAA has stated that it rejected any alternatives which did not have the capacity to meet “unconstrained forecast demand”(FEIS U.4-594, U.4-586, U.4-253 *passim*). FAA also concluded that Alternative C (*i.e.*, the full build OMP-Master Plan proposed by Chicago) would meet unconstrained forecast demand and therefore was eligible to be selected as the preferred alternative. By making this assertion, FAA was able to claim that it need not consider any blended alternatives (discussed below) because FAA’s preferred alternative (Alternative C) met the “unconstrained” demand.

71. In making this assertion — that full build OMP-Master Plan (Alternative C) would meet unconstrained forecast demand — FAA improperly manipulated each of the three principal variables just discussed: 1) Forecast Demand; 2) The Acceptable Period of Delay, and 3) the Time Period of Analysis. FAA performed this manipulation to conceal the problems with the full build OMP-Master Plan; to conceal the fact that the full build OMP-Master Plan will not meet the unconstrained demand; and to avoid the fact that FAA will be required to use a blended alternative (*i.e.*, demand management and the use of other airports) with the full build OMP-Master Plan to accommodate the “unconstrained” forecast demand.

72. Once that likelihood is established — *i.e.*, that FAA will be required — even with Alternative C— to utilize blended alternatives, then there is no reason why FAA cannot and should not consider blended alternatives at lesser levels of development at O’Hare — including the existing O’Hare or other runway options that do not destroy the homes, businesses, parkland and St. Johannes Religious Cemetery.

73. Rather than address the collective impact of FAA’s misuse of all three major variables, I first address the individual impact of FAA’s misuse of each of the principal variables:

74. **The Understated Forecast Demand.** FAA persists in using the 2002 TAF even though later TAFs (2003 and 2004) show that the Forecast Demand will reach the point where — even under the FAA’s unprecedented use of a 15 minute AAAW standard — Alternative C (*i.e.*, the full build OMP-Master Plan) will be out of capacity within a few years after the project opens. Attached as Exhibit D to this affidavit is a spreadsheet showing the Forecast Demand of ORD operations under the 2002 TAF through the 2004 TAF. The following analysis examines the implications of using the different forecasts in terms of the ability of OMP to handle projected demand²:

² The predicted years when full build OMP will hit various delay levels is based on three model results provided for OMP: (1) 5.8 minutes of AAAW delay at 1.2. million operations from FEIS modeling of Alternative C, (2)

- A. **The 2003 TAF** The 2003 TAF shows that the Forecast Demand will hit the FAA's 15 minute AAW ceiling in the 2018-2019 time frame. FAA refused to model the 2003 TAF (see discussion below) but in Appendix R to the FEIS makes the following statement that is applicable to the 2003 TAF:

“Using extrapolation and professional judgment, the FAA believes that Alternative C with the high range forecast would most likely perform at an average annual delay of between 13 and 16 minutes per operation at the high range forecast level in 2018 (1.4 million operations).

Given the slope of the delay curve, it is virtually certain under the 2003 TAF Alternative C (full build OMP-Master Plan) will exhaust its capacity by 2018-2019. If one used the lower numbers for the **Level of Acceptable Delay** used elsewhere by FAA (even the highest number used elsewhere, *i.e.*, 10 minute AAW) then Alternative C (full build OMP-Master Plan) will exhaust its capacity even sooner (approximately 2015 for a 10-minute delay; between 2013 and 2015 for an 6-8 minute delay) using the 2003 TAF.

- B. **The 2004 TAF.** FAA asserts that it is justified in part in refusing to run the modeling on the 2003 TAF because the 2004 TAF “validates” the use of the 2002 TAF (FEIS U.4-31, U.4-538 *passim*). On the contrary, despite its questionable evidentiary foundation (see discussion below) the 2004 TAF demonstrates that under the 2004 TAF Alternative C (full build OMP-Master Plan) will exhaust its capacity by 2023 under FAA's extreme 15 minute AAW standard. If one used the lower numbers for the **Level of Acceptable Delay** used elsewhere by FAA (even the highest number used elsewhere, *i.e.*, 10 minute AAW) then Alternative C (full build OMP-Master Plan) will exhaust its capacity even sooner (approximately 2019 for a 10-minute delay; between 2016 and 2018 for an 6-8 minute delay) using the 2004 TAF. Contrary

10.9 minutes of delay at 1.3 million operations from Ricondo's 2003 study, and (3) 13-16 minutes of delay at 1.4 million operations from FEIS Appendix R (see Exhibit D). These results correspond closely to Campbell-Hill's analysis of delay levels using the Campbell-Hill Adjustment A curves.

to the statements in the FEIS, the use of the 2004 TAF demonstrates unequivocally that Alternative C will exhaust its capacity under the 2004 TAF Forecast Demand and FAA will be required to use a blended alternative (*i.e.*, demand management and other airports) in combination with Alternative C. If FAA can and must use a blended alternative with full build OMP-Master Plan there is no reason why FAA cannot employ either existing O'Hare or lesser levels of development at O'Hare in combination with demand management and use of other airports) — blended alternatives which would avoid the destruction of the homes, businesses and parklands in Bensenville and Elk Grove Village and the destruction of St. Johannes Cemetery.

- C. The 2002 TAF.** FAA persists in using the 2002 TAF because FAA says it would take too long to use the 2003 or 2004 TAF in another modeling exercise – suggesting it would take a year to re-run the TAAMs model with the new input data. FAA has provided no documentation for this claim other than its *ipse dixit* statement that it would take too long. Further, the FAA persists in making generic statements about the 2002 TAF for which it has no basis. For example, here is the time frame that FAA states full build OMP-Master Plan will hit the 15 minute AAW limit under the 2002 TAF:

“Using the aviation activity forecasts compiled for the DEIS, activity growth appears likely to result in delays reaching levels similar to those experienced today—between 13 and 16 minutes per operation—sometime in the mid-2020s. Should aviation activity grow faster than forecast—as the commenter asserts—delays would be likely to reach levels similar to those experienced today sooner.“

U.4-526 (emphasis added)

While the quotation from the FEIS is supportive of the fact that Alternative C (full build OMP-Master Plan) will run out of capacity – even under the 2002 TAF – by the mid 2020s, thus requiring FAA to use a blended alternative with the full build OMP-

Master Plan even with the 2002 TAF, FAA provides no data or analysis to support this statement.

75. **The Manipulation of the 2004 TAF.** Even accepting *arguendo* the 2004 TAF as valid (which it is not), the 2004 TAF Forecast Demand shows the full build OMP-Master Plan running out of capacity by 2023 –requiring the use of the blended alternatives of demand management and other airports. But there are serious concerns about whether someone at FAA has manipulated the 2004 TAF downward so as to soften the impact of the Forecast Demand on the capacity and delay limitations of full build OMP-Master Plan, and to assess the reasonableness of staying with the 2002 TAF.

76. My firm and I specialize in aviation demand forecasting and we are very familiar with the methods used to prepare the Terminal Area Forecast (TAF). As stated by the FAA:

“The TAF is prepared by FAA staff using industry-standard methodology—including statistical analysis of historical trends, review of recent trends in airline service, and assumptions regarding future airline developments.”

FEIS, B-3

For large hub airports, TAF forecasts are based on a regression analysis of income and other local socio-economic variables.

Aviation Forecast Q and A. FAA APP-400, 3-14-05

“FAA disagrees with the comment [by Campbell-Hill] that the decrease in activity from the 2003 TAF to the 2004 TAF is unjustified. FAA conducts a comprehensive review of recent airline activity and future outlook for each annual TAF. This review is coordinated with a review of national aviation trends used in developing the forecast of aviation activity for the nation as a whole. In preparing the 2004 TAF, FAA determined that the long-term outlook for ORD was different from that reported in the 2003 TAF, and this is reflected in the results of the 2004 TAF. The FAA finds the commenter data for a few recent historical years unpersuasive on this issue. The assumptions regarding the future growth at ORD are based on the judgments of the FAA’s forecast experts.”

FEIS, p. U.4-540 (emphasis added)

77. Given my personal professional familiarity with forecasting methodology and FAA's use of "regression analysis of income and other local socio-economic variables" in preparing the TAFs, I am perplexed by the unexplained and very large drop in forecast enplaned passengers from the 2003 TAF to the 2004 TAF. (see Exhibit E to this Affidavit) All of the "income and other local socio-economic variables" that would have been used for the 2004 TAF supported the use of higher growth rates — and thus higher enplanements in the 2004 TAF than the 2003 TAF.

78. As the Inspector General stated, FAA cannot rely on bald statements of self-proclaimed "expertise", without supporting evidence and calculation, to justify the huge drop in the 2004 TAF. Campbell-Hill has prepared a detailed review of the available data and economic variables comparing 2003 with 2004 (attached as Exhibit F). Based on that detailed data and analysis, it is clear that the 2004 TAF should have been higher than in the 2003 TAF — not substantially lower.

79. Further, on August 26, 2005 FAA purported — in response to Freedom of Information Requests that had been outstanding for several months — to produce the backup documents used by FAA in the preparation of the 2002, 2003, and 2004 TAF. The documents provided do not allow independent forecasting experts such as we have at Campbell-Hill to replicate or recreate the forecast values used by FAA in the 2004 TAF. There is simply no evidentiary basis for the FAA's 2004 TAF values.

80. However, the backup papers released by FAA on 2004 do confirm Campbell-Hill's opinion that FAA knew of and used significantly higher growth rates in the 2004 TAF working papers than the growth rates used in the 2003 TAF. There is simply no data or substantiation for the substantial decline in enplanements and operations between the 2003 TAF and the 2004 TAF.

81. Based on both Campbell-Hill's independent computations and analysis — using the same "industry standard" techniques as does the FAA— and on our examination of the backup documentation for the 2003 and 2004 TAF provided by the FAA on August

26, 2004 I conclude that a properly calculated 2004 TAF would have produced higher numbers of enplanements and operations in corresponding years than the 2003 TAF. Based on the narrative statement in Appendix R of the FEIS that the full build OMP-Master Plan would experience 13-16 minutes of delay in 2018 under the 2003 TAF Forecast Demand (and thus under FAA's 15 minute AAW delay standard, be out of capacity in the 2018-2019 time frame), I conclude that under a properly revised 2004 TAF, the full build OMP-Master Plan would reach 1.4 million operations and thus be out of capacity (based on FAA's use of a 15 minute AAW) several years before 2018. Further, if the lower delay levels used by FAA at other airports (*e.g.*, Philadelphia, Boston, Miami, Washington Dulles, and Denver) were used as the Level of Acceptable delay for O'Hare, the full build OMP-Master Plan would be out of capacity virtually on the day it opens

82. Further, the claimed delay savings as comparing existing O'Hare vs. the full build OMP-Master Plan are time limited and illusory for several reasons:

- A. **Failure to Conduct FEIS TAAM modeling on the Existing Airport With FAA's Scheduling Order In Place.** FAA compares its model of "existing O'Hare" with OMP and states that existing O'Hare has experienced and will experience 15-17 minutes of delay in the future. However, FAA did not — in the TAAMs modeling done for the FEIS— model the delay performance of the existing O'Hare with the FAA's current scheduling order in place (*i.e.*, 88 arrivals per hour). FAA has not shown that the modeled TAAM values for this base case would be anywhere near 15-17 minutes AAW. FAA has reported that its scheduling order requirements have led to a 27% drop in delays on a year to year basis. Further, should FAA decide that more delay reduction is desirable or necessary, FAA can simply adjust the demand management program currently in place. Nor can FAA fall back on a claim that reported ASPM values validate the TAAMs modeling and that ASPM values can be a proxy for modeling. As FAA has acknowledged the ASPM values are often predicated on bad weather conditions that are not represented in the TAAM model.

The result is that ASPM may report higher delay values than would an “apples to apples” comparison of modeled TAAM values for the existing airport with the scheduling order in place compared to full build OMP-Master Plan.

- B. The Claimed Delay Savings Disappear Rapidly.** The FEIS claims that the full build OMP-Master Plan will produce a major delay savings over the existing O’Hare — claiming a delay differential of 12.2 minutes in 2013 and 11.3 minute in 2018. But these so-called delay savings are predicated on the 2002 TAF. If one were to use the 2003 TAF or the 2004 TAF (adjusted or unadjusted) the delay savings would disappear as traffic rises and delays increase. FAA has failed to disclose the fact that delays will rise rapidly under the 2003 and 2004 TAFs wiping out the delay savings very rapidly.
- C. Failure to disclose the taxi time penalty in the FEIS.** In Chicago’s submission of its benefit-cost analysis for its request for AIP “discretionary funding” Chicago discloses the fact that because the full build OMP-Master Plan will have runways much further out from the terminals than the existing runways, the full build OMP-Master Plan will have a penalty of added aircraft taxi time — as compared to the existing airport— of approximately 6.5 minutes per aircraft operation. When one applies the 2003 and 2004 TAF Forecast Demand with the taxi time penalty added, it appears that there will be little or no travel time savings from the day full build OMP-Master Plan opens.

83. **The Manipulation of the Acceptable Level of Delay.** Based on a review of the other airports cited by FAA and the statements about the acceptable level of delay made by FAA and DOT elsewhere, O’Hare is the only airport in the nation where FAA has used a 15 minute AAAW as the Acceptable Level Of Delay for determining the practical capacity of a proposed airport. The maximum number for Acceptable Level of Delay used at any other airport was 10 minutes AAAW. FAA’s use of a 15 minute AAAW as the Acceptable Level of Delay dramatically overstates the capacity of the full build OMP-Master Plan and overstates the year in which the full build OMP-Master Plan runs out of capacity. Further,

FAA continues to refuse to disclose the bad weather or IFR delay values associated with a TAAM modeling of a 15 minute AAW. The IFR average delay values associated with a 15 minute AAW would likely be higher than an average of 70 minutes and would be incompatible with the operation of a hubbing airport. Here are the conditions described by the USDOT in its 1995 report on delays at O'Hare as to the effects of the highest levels of delays at hub airports:

- *8 to 10 minutes of delay per operation: increasing VFR delays in peak hours with translation to shoulder hours in all but optimum conditions; high delay in IFR with resulting flight cancellations.* -
- *Over 10 minutes of delay per operation: VFR operations experience increasing delays in peak periods and shoulder hours in all but optimum conditions; very high delays in IFR resulting in extensive flight cancellations.*

...[W]hen the AAW delay per operation reaches **6 minutes**, project planning, engineering and design of capacity improvements should be actively pursued. When AAW delay reaches **eight minutes**, implementation of capacity improvements should be underway.

1995 DOT HDR Report, Technical Supplement
3, page D-2 (emphasis added in bold
underscore and italics)

FAA in the FEIS declines to describe the chaos that would exist in IFR average delay conditions at 15 minutes AAW.

84. FAA's refusal to model and describe the IFR delay as the AAW delay for the full build OMP-Master Plan climbs toward 15 minutes AAW – 2023 under the uncorrected 2004 TAF — is highly questionable. One of the declared purposes of the OMP was supposedly to achieve a balance between VFR processing (and VFR delays) and IFR processing (and IFR delays). FAA has refused to model IFR delays at demand levels higher than 1.2 million operations and thus leaves hidden what are likely to be very high IFR average delays as the traffic climbs to the 1.4 million operations. Based on what we know

about the earlier Ricondo modeling at 1.3 million operations, IFR delays exceeded 40 minutes on average under some conditions (with a 10.9 minute AAW). Extrapolating an IFR delay curve from FAA's stated IFR delay at 1.2 million operations, and Ricondo's IFR delay at 1.3 million operations, and FAA's "professional judgment" call for AAW of 13-16 minutes AAW at 1.4 million operations, it is clear that average IFR delays at 1.4 million operations could exceed 70 or more minutes. Clearly the full build OMP-Master Plan will not achieve the goal of balanced VFR and IFR delays.

85. **The Manipulation of the Time Period Of Analysis.** As discussed above the FAA initially made a multi-million dollar AIP planning grant to the City of Chicago in 2002 to conduct a study of the capacity and delay characteristics of the full build OMP-Master Plan and specified that the Time Period of Analysis should extend to the year 2030. In early March 2004 Chicago submitted an application for a \$300 million AIP discretionary grant. The requirement to qualify for an AIP grant includes that: a) Chicago and the FAA must evaluate the full build OMP-Master Plan over a Time Period of Analysis from the opening of the project (2013) plus 20 years (to 2032) and b) that the FAA must evaluate alternatives to the proposed project within the framework of that 20 year Time Period of Analysis.

86. Despite this history, FAA in the FEIS states that FAA is only required to use a Time Period of Analysis that encompasses a "foreseeable time frame" — and FAA says that the foreseeable Time Period of Analysis is only five years from the opening of the project. However restricting the Time Period of Analysis to only five years from the start of the project is arbitrary and unreasonable because: a) using only a five year Time Period of Analysis provides misleading information about the impacts of the project, including the failure to disclose facts that the full build OMP-Master Plan will run out of capacity and that delay savings will disappear and b) using only a five year Time Period of Analysis hides the reality that FAA will necessarily have to employ a blended alternative (*i.e.*, demand management plus use of other airports) even with the full build OMP-Master Plan. FAA's

claim that use of a longer Time Period of Analysis would “not be credible” is disingenuous, arbitrary, and irrational. Not only did FAA fund a 2030 Time Period of Analysis in its 2002 planning grant, but the FAA’s evaluation and decision on Chicago’s application for an AIP discretionary grant requires FAA to evaluate both the proposed full build OMP-Master Plan and alternatives over a Time Period of Analysis from the opening of the project (2013) to 2032. Finally, it is common in large public works projects to evaluate the proposed project and alternatives to the project over a significantly longer period than five years — typically 20 years.

X. There are several feasible alternatives which would avoid the destruction of the homes, businesses and parklands in Bensenville and Elk Grove Village and avoid the destruction of St. Johannes Religious Cemetery

87. As discussed above, central to FAA’s selection of Alternative C (full build OMP-Master Plan) — and the rejection of lesser development alternatives which would avoid the destruction of the homes, businesses and parklands in Bensenville and Elk Grove Village and avoid the destruction of St. Johannes Religious Cemetery — were the FAA assertions that:

- A. Only Alternative C, D, and G could meet unconstrained forecast demand at the airport and that only alternatives that could meet forecast demand would be considered.
- B. That Alternative C produced greater delay reductions than any of the other alternatives.
- C. That FAA had no “authority” to force airlines to use other airports and thus no authority to implement a “blended alternative” (*i.e.*, use of some lesser level of development at O’Hare in combination with demand management and use of other airports.)

88. Ignored by the FAA was the uncontestable fact that full build OMP-Master Plan simply cannot be financed (see discussion above). As the Inspector General has said without reliable and secure financial resources to build the full build OMP-Master Plan,

FAA will be compelled by necessity to employ a blended alternative at O'Hare. As discussed below, once the need for a blended alternative is recognized, there are several blended alternatives which would address delays, address the need to handle future traffic, and avoid the destruction of the homes, businesses and parklands in Bensenville and Elk Grove Village and avoid the destruction of St. Johannes Religious Cemetery.

89. However, I have conducted my alternatives analysis accepting *arguendo* the FAA's unfounded assumption that somehow the \$14.29 billion (and all the other unquantified costs described above) are somehow magically available. Putting the lack of financial feasibility aside, I have examined the first two of the FAA's central assertions (ability to accommodate unconstrained demand and larger reduction in delays) and found them to be without merit.

90. In the FEIS FAA has examined a number of alternatives which combine lesser levels of development at O'Hare and demand (or congestion) management with use of other airports. These are what FAA calls "Derivatives" and I call alternatives H through N and they are listed at page 3-62 of the FEIS:

- **Derivative H** – No Action with Use of Other Airports and Congestion Management (Average Annual Delay of 9.3 Minutes per Operation)
- **Derivative I** – No Action with Use of Other Airports and Congestion Management (Average Annual Delay consistent with NPRM Modeled Delay)
- **Derivative J** - No Action with Use of Other Airports and Congestion Management (Average Annual Delay 4, 6, 8 Minutes per Operation or other FAA Level)
- **Derivative K** – OMP Phase I (Original Alt. B) along with Use of Other Airports and Congestion Management
- **Derivative L1** –Refinement of Alternative B, with the Northernmost Runway moved to a southern position.
- **Derivative L2** – Refinement of Alternative B, with the Northernmost Runway moved to the south, and the new Runway 10C moved to the north.
- **Derivative M** – No Action with a New South Runway only (4300' south from existing Runway 9R/27L)
- **Derivative N** - No Action with a New South Runway only (5000' south from existing Runway 9R/27L)

91. Alternatives H, I, and J are alternatives that use the existing airport and employ the same kind of congestion management that is in use by FAA today at O'Hare through its scheduling order and is used elsewhere in the country at LaGuardia and Reagan National. Under congestion or demand management, the FAA simply assesses the level of delay that is desirable and establishes operational requirements (*e.g.*, a limit of 88 arrivals per hour at O'Hare) that will produce the standard of acceptable delay. Alternatives H, I, and J are without question feasible because they employ the existing airport and there no questions of technical feasibility associated with those alternatives. These alternatives (which are "blended alternatives") were rejected by FAA because: a) they did not "serve forecast demand" and b) because they would allegedly yield less delay reduction than would full build OMP-Master Plan.

92. Alternatives L1, L2, and M and N would also likely require demand management and the level of delay they experienced would depend on what level of delay FAA deemed acceptable, be it the same delay as in the current scheduling order or a different level of desired delay.

93. Further, despite a lengthy technical discussion of L1 and L2 FAA concludes that each of these alternatives are "potentially feasible" (FEIS at 3-68). However, these two alternatives are also rejected because they would yield less delay savings than FAA's Alternative B (Phase One) which FAA has also stated would not meet the unconstrained demand and would have delay saving less than full build OMP-Master Plan. (Id at 3-68 to 3-69)

94. Similarly FAA concluded that Alternatives M and N, were "potentially feasible" (FEIS at 3-73). However according to FAA these alternatives would not meet the "purpose and need" presumably because they did not have the capacity to serve unconstrained forecast demand and because according to FAA, they would produce less delay savings than full build OMP-Master Plan.

95. The fallacy in FAA’s cavalier rejection of these alternatives is demonstrated by the fact that FAA’s preferred alternative (FAA’s Alternative C – the full build OMP-Master Plan) will not meet purpose and need even if it could be funded. Based on the uncorrected 2004 TAF the full build OMP-Master Plan will run out of capacity by 2023 — requiring FAA to utilize a “blended alternative” (*i.e.*, demand management and the use of other airports) with the full build OMP-Master Plan. Use of a corrected 2004 TAF (to address the strange unexplained anomalies in the creation of that TAF to reflect the higher economic growth rate that should have produced higher operations and enplanements than 2003) results in full build OMP-Master Plan running out of capacity no later than 2019 and probably earlier.

96. Similarly, as FAA has acknowledged, delays will mount under full build OMP-Master Plan and again based on the 2004 TAF any delay savings between the approximately 17 minutes of delay FAA claims for the existing airfield and the 5.2 to 5.8 minutes of AAW delay that FAA asserts for the full build OMP-Master Plan will be exhausted by 2023 under the uncorrected 2004 TAF and by 2019 under the corrected 2004 TAF.

97. Moreover, these dates and delay differentials do not take into account the approximately 6.5 minute additional taxi time penalty which the full build OMP-Master Plan must bear because of the extended outboard runways of the full build OMP-Master Plan as compared to existing O’Hare. Putting that 6.5 minute penalty into the analysis shows that under the 2004 TAF the full build OMP-Master Plan will have no travel time benefit over the FAA asserted 17 minute existing airfield in 2019 and even earlier if a corrected 2004 TAF is used.

98. It is clear from these facts that:

- A. The full build OMP-Master Plan does not meet and cannot meet unconstrained demand.

- B. To address unconstrained 2004 TAF demand, FAA will be required to use a blended alternative (*i.e.*, congestion management and other airports) in combination with full build OMP-Master Plan. Once the need for a blended alternative is acknowledged, FAA has acknowledged that other blended alternatives — *e.g.*, Alternatives H, I, J, M, and N are feasible. Indeed, FAA has asserted that Alternative K (Phase One) would require a blended alternative.
- C. Any so-called “delay savings” associated with full build OMP-Master Plan — as compared to FAA’s asserted 17 minute delay at existing O’Hare will be rapidly exhausted and within a few years after it opens, full build OMP-Master Plan will not have any delay savings advantage over the FAA’s asserted 17 minute delay at existing O’Hare.

99. Further, these facts make clear that several of the alternatives put forward in Alternatives H, I, J, L1 and L2 and M and N – all of which would employ demand management — would have superior delay performance over full build OMP-Master Plan without demand management. For example,

Alternative	Level of delay per operation
Full build OMP-Master Plan in 2023 at 15 minutes AAW delay plus 6.5 minutes taxi delay — without demand management	21.5 minutes
Derivative H – No Action with Use of Other Airports and Congestion Management (Average Annual Delay of 9.3 Minutes per Operation)	9.3 minutes
Derivative I – No Action with Use of Other Airports and Congestion Management (Average Annual Delay consistent with NPRM Modeled Delay)	[unknown] FAA has not run TAAMs model on FAA Scheduled Order delays
Derivative J - No Action with Use of Other Airports and Congestion Management (Average Annual Delay 4, 6, 8 Minutes per Operation or other FAA Level)	4, 6, or 8 minutes as selected by FAA

100. Alternatives L1 and L2 and M and N, and even Phase One would have similar levels of delay performance at similar levels of delay selected by FAA under demand management.

101. In summary there are several alternatives which would avoid the need to destroy the homes, businesses, park lands in Bensenville and Elk Grove and the destruction of St. Johannes Cemetery. These alternatives would be blended alternatives just as FAA will be required to use blended alternatives with full build OMP-Master Plan when it runs out of capacity shortly after it opens.

XI. FAA’s Claim of Lack of Authority to Implement a Blended Alternative is Without Merit.

102. FAA claims in that it cannot implement a blended alternative — *i.e.*, congestion management and the use of other airports in conjunction with various levels of development at O’Hare because FAA cannot compel the use of other airports. As stated by the FAA:

A significant component of the Blended Alternative is the use of other airports. The use of other airports is driven by the market and cannot be directed by the FAA. In a deregulated domestic aviation industry, the Federal government does not control where, when, and how airlines provide their services; nor is the Federal government the driving force in airport capacity development or airport utilization. Rather, the aviation industry, in partnership with local and regional government, in response to market demand, drives where and how air travel is accommodated.

FEIS p. 3-42 (emphasis added)

Under present law, the federal government cannot prescribe controls affecting the rates, routes, or services governing commercial aviation. Similarly FAA cannot require a change in the passenger distribution pattern of other modes of transportation.

ID (emphasis added)

103. FAA has set up a legal ‘straw man’ argument here that suggests that use of a “blended” alternative somehow requires FAA to issue an order “directing” or “compelling” airlines to use certain airports. On the contrary, we are not advocates of FAA orders “directing” the airlines to use other airports. Moreover, nothing in the Blended Alternative evaluation requires the issuance of such an order.

104. The entire evaluation of blended alternatives — and the implementation of blended alternatives — can be undertaken within the framework of existing FAA authority involving the power of the pen and the power of the purse. As stated by the FAA in its recent Record of Decision for Logan Airport where the FAA ordered Massport to develop a demand management program:

“While FAA does not have the authority to control or direct the actions and decisions of Massport relative to planning for Logan airport, FAA does have the authority to withhold project approval, including federal funding and the other federal actions discussed in this ROD.”

ROD p 6 (emphasis added)

“The EIS and MITRE findings not only point to the long-term significance of the runway [a proposed 5000 foot RJ runway] in reducing delays, but also indicate that demand management needs to be considered as a viable long-term measure.”

Id at p. 12 (emphasis added)

“This requirement to develop and submit a detailed plan [for demand management] is a condition of the ROD and if Massport does not fulfill this requirement, the FAA is entitled to use a full range of legal options to compel Massport to fulfill this requirement.”

Id, ROD Part 2 at p. 16 (emphasis added)

105. Indeed, a blended alternative is currently in place at O’Hare today as a result of the FAA Scheduling Order. FAA has observed that as a necessary consequence of demand management at O’Hare, the airlines will use other hub airports to accommodate the excess unsatisfied demand to accommodate transfer passengers. As stated by the FAA in its *Preliminary Regulatory Evaluation* (March 1, 2005) to support the FAA’s proposed scheduling order in its March 2005 Notice of Proposed Rulemaking:

“..[T]he hubbing carriers have many alternatives to reroute passengers

Id at 38

“With a large share of the passengers on connecting flights, hub carriers such as United and American would have many alternatives to reroute their passengers to their final destination...We believe that hub carriers could retain the connecting passengers on the remaining flights through alternative hub airports.

Id at 41.

106. These comments by FAA in its NPRM proceeding reflect the exact reasoning contained in a 1996 letter by executives from United and American stating that American and United have great flexibility in moving transfer traffic between hubs. FAA dismisses the letter as “dated”(without any basis for FAA’s conclusion) but the operational flexibility reflected in that letter is the same as the flexibility addressed in the March 1, 2005 FAA report. There is nothing “dated” about the facts or the logic of the 1996 letter by executives from United and American.

107. As Campbell-Hill pointed out in our earlier filings with FAA in this matter, FAA can use either its grant power (and the related imposition of conditions on the grant as per the Boston Logan example) or the regulatory power through mechanisms such as the scheduling limitations currently in use at O’Hare, LaGuardia, and elsewhere. In our earlier filings with FAA we pointed out that the recent Record of decision in Los Angeles calls for and approves a blended alternative for LAX in which less than all of the unconstrained demand will be accommodated at LAX. The physical limitations at LAX will have the necessary effect of moving flights that would otherwise use LAX to other airports.

108. Similarly the communities and the Religious Objectors have pointed out that Chicago implemented and FAA approved a Record of Decision in 1984 for O’Hare that expressly rejected an alternative (new runways) that would be needed to carry the “unconstrained” demand and instead opted for an alternative development at O’Hare that would carry that traffic which could be carried by the existing runways with the use of other hub airports for the excess demand. O’Hare has been using a “blended alternative” with FAA’s approval since 1984.

XII. Compelling Governmental Need and Availability of Alternatives To Avoid Destruction of St. Johannes Religious Cemetery

109. I have been asked if I am aware of any facts which are relevant to the questions of:

- A. Whether there is a compelling governmental need for O'Hare to accommodate all of the transfer traffic which United and American wish to route through O'Hare.
- B. If there is such a compelling governmental need, are there alternatives to meet that need which would avoid destruction of St. Johannes Cemetery.

110. There is no compelling governmental need to force all of the transfer traffic that United and American wish to push through O'Hare into an expanded O'Hare (in accordance with the FAA forecast). It is important to emphasize that — as pointed out by the executives of United and American in their 1996 letter— the existing O'Hare has enormous reserves of capacity for local “origin-destination” passengers for decades into the future.

111. The delay and capacity crunch comes when United and American make private economic decisions for what they perceive to be their private competitive economic advantage to move transfer traffic (traffic that never sets foot outside the airport) between their various hubs (Denver, Dulles, and O'Hare for United; Dallas and O'Hare for American).

112. In my opinion the decision to push transfer traffic into O'Hare to the point that delays rise to pressure for the destruction of a religious cemetery is essentially a private economic decision which does not fill any compelling national or compelling local governmental need.

113. Even if some compelling governmental need was identified, full build OMP-Master Plan does not satisfy that need and there are (as discussed above) several alternatives by which the airlines using O'Hare can use other options to service their transfer passenger needs without destroying St. Johannes Cemetery. As discussed above, any so called “delay savings” made by destroying the religious cemetery will be short lived and there are less destructive alternatives that have equal or greater delay savings. Similarly, as FAA has acknowledged in its scheduling order documents, United and American have several

alternatives to route their excess transfer passengers without destroying the religious cemetery.

XIII. FAA's Baseless Assertions

114. FAA in late July released several hundred pages of detailed and somewhat disorganized comments on Campbell-Hill's earlier reports. We have not had the time to go through and respond to all of these comments in the time frame provided by FAA for response — September 6, 2005. By not responding to each comment, I do not mean to create the implication that we agree with each FAA comment. Nevertheless, given the shortness of time, I feel compelled to address some of the most serious errors in the FAA comments.

XIV. USE OF OTHER MID-CONTINENT AIRPORTS

115. As Campbell-Hill reported in its earlier filings with FAA, FAA performed no analysis of the potential use of other hubs to satisfy growth projected for O'Hare's connecting traffic. There are many hub airports that have sufficient available capacity and the FAA has the authority to exercise congestion management measures that would encourage airlines to use other airports. Also, its funding decisions (the power of the purse) influence airline scheduling decisions over their route network as well as their marketing and pricing strategies (C-H April 6, 2005 Report, pages 70-74).

116. **FAA Assertion.** FAA agrees that there is idle capacity at other mid-continent hubs, but it argues that it has no statutory authority to force a shift to other hubs. The FAA states that O'Hare is unique because of its "significant origin-destination traffic, historical function as a connecting hub, and one of the most important international gateways." (Comment 129) Since O'Hare is so unique, it is unlikely that the major airlines at ORD will be able to successfully use other mid-continent airports. The FAA also attacks Campbell-Hill using the term "mid-continent" to describe airports such as Atlanta,

Charlotte, Newark, Dulles, Philadelphia, and Pittsburgh. The FAA also says that a report called, *The National Impact of Civil Aviation*, co-authored by Campbell-Hill in 2002 lists some of the airports in this report that have additional capacity as airports that need capacity improvement (Comments 129, 130, and 131).

117. **Campbell-Hill Response.** Campbell-Hill's report explained that the FAA has implemented congestion management schemes that have had the effect of shifting traffic to other airports. Campbell-Hill never suggested that the FAA has the authority to force airlines to use certain airports. Campbell-Hill's point is that if congestion management is in place, airlines are likely to use other connecting hubs that have sufficient available capacity. This way the marketplace (individual airline decision-makers) decides how it wants to utilize a constrained (not unlimited) resource.

118. Also, the uniqueness of ORD will not deter airlines from shifting some connecting traffic to other airports. In fact, many of the airports that Campbell-Hill mentioned as competing hubs have high yields for connecting passengers and high load factors. The yields for passengers connecting over MEM, CLT, STL, DTW, PIT, ATL, IAH, CVG, and MSP are all higher than the yield of passengers connecting over ORD. Airlines are more likely to care about yields at other hubs than ORD's "historical function as a connecting hub."

119. The fact that some competing hubs that Campbell-Hill mentioned do not have a true "mid-continent" location is irrelevant. Regardless of their location, these are hubs that airlines could use to connect passengers instead of using ORD, and they are all hubs that compete with O'Hare today for connecting traffic.

120. The airports listed in Campbell-Hill's 2002 study entitled *The National Impact of Civil Aviation* were the airports with planned infrastructure improvements based on FAA sources. Campbell-Hill made no assessment of the economic merits of any of the programs referred to in the report. Just because some of the airports have planned capacity improvements does not mean that they are currently out of capacity, or that they pass a

rigorous benefit/cost test. In the situation of O'Hare's OMP, the costs outweigh the potential small and short-lived delay benefits, while at the same time increasing access times and terminal facilitation times.

121. **FAA Assertion.** In Chapter 3 of the EIS, the FAA intuitively considered the use of other mid-continent hubs as an alternative to relieving congestion and addressing future demand at O'Hare (Comment 129)

122. **Campbell-Hill Response.** As Campbell-Hill stated in its report, the FAA's entire treatment of the use of mid-continent hubs is contained in two pages. The FAA irresponsibly dismissed this alternative by arguing that it does not have the authority to mandate the use of other airports. As Campbell-Hill has shown, the FAA has a history of using congestion management measures that have had the effect of shifting traffic to other airports. The FAA moved its mention of mid-continent airports from obscurity in Appendix C of the DEIS to Chapter 3 in the FEIS. It is clear the FAA did this because putting it in the appendix, which is supposed to have details of the FAA's analysis, highlights the fact that the FAA dismissed the potential use of other mid-continent hubs without performing any analysis at all. It still has performed no analysis, but relies solely on biased opinion and conjecture. FAA cannot blindly rely on self-declared unsubstantiated "expertise", without evidence or logic to support its assertions.

XV. ORD As An International Gateway

123. Campbell-Hill in its earlier comments to FAA pointed out that even with a shift of some transfer traffic to other hubs, O'Hare's origin-destination ratio would still be comparable to other international hubs.

124. If a portion of ORD's connecting passengers was shifted to other mid-continent hubs, ORD's local to connecting ratio would increase to 61:39 by 2018. This is similar to many international gateways including JFK, LAX and SFO. Therefore, it is

reasonable to conclude that O'Hare would continue as a major international gateway (C-H Report, page 71 and 73)

125. **FAA Assertion.** FAA asserts that the other gateways cited by Campbell-Hill are not relevant because they are not “inland” gateways. FAA asserts that of the airports listed in Exhibit 400, ATL is most similar to ORD because it is a major inland international gateway. ATL has a larger connecting share than ORD today. This indicates that a large connecting share is required to support an international gateway at an inland airport (Comments 130 and 132).

126. **Campbell-Hill Response.** This claim by FAA is simply a *non sequitur* with no logical or empirical basis. ATL is not an inland gateway. It is 240 miles from the Atlantic coast and it is less inland than Dallas, which is 340 miles from Mexico. O'Hare is only 250 miles from Canada. ATL is not in any way an inland point.

127. The fact that ATL has a larger share of connecting passengers does not support the conclusion that a connecting share larger than 39% is needed at ORD for it to operate as an international gateway. The Atlanta local/connecting ratio simply demonstrates that it is a much smaller local O&D market than Chicago (27.9 million vs. 42.8 million), which is supported by a much smaller population (5.0 million vs. 9.6 million). Another reason for ATL's local/connecting ratio is that because of geography and history it is Delta's largest system hub. Due to the factors discussed above, the math simply produces a comparatively low local/connecting ratio for ATL

128. Toronto Pearson Airport is a major inland international gateway and it has a connecting share of only 25%. Over 50% of all Toronto departures are international and one in four departures is operated by a foreign carrier. The Toronto metro area population is slightly larger than the Atlanta metro area population (5.3 million vs. 5.0 million). Toronto belies the FAA's contrived theory for basing its entire response on Atlanta.

XVI. LAX EIS ISSUES

129. Campbell-Hill in its earlier comments to FAA pointed out that FAA's work in the LAX EIS was more sensible and responsible because it truly focused on a balanced regional approach that uses a "blended alternative of LAX in combination with other airports. The ORD EIS on the other hand focuses only on the use of ORD for accommodating future increases in traffic demand.

130. **FAA Assertion.** FAA claims that The LAX EIS is not comparable to the ORD EIS because..."1. The airport systems in the Los Angeles region and the Chicago region are different; 2. The roles of LAX and ORD are different; and 3. The sponsor requests in each case are different." (Comment 138) The wide geographic spread of the Los Angeles region makes it easier for regional airports to serve regional demand. Chicago is not as densely populated. Also, ORD is different because it is more of a connecting hub than LAX. "ORD competes with other hubs such as DEN and DFW for connecting traffic, both domestic and international. Without a substantial critical mass of air service at ORD, the connecting hub airlines serving ORD would not be competitive in terms of frequency of connections and the availability of attractive fares." (Comment 138) The FAA also stated that because ORD serves as a major international gateway and connecting hub it is not practical to assume that flights will be spread to other airports, despite available capacity (Comment 138).

131. **Campbell-Hill Response.** The geographical spread of a population should not effect the FAA's consideration of alternatives that benefit the people of a whole region, instead of just one airport. Indeed, FAA is pursuing the same kind of regional approach in the Northeast (using multiple airports to address Boston Logan's excess long term demand) as is the FAA in the Los Angeles Metropolitan Area.

132. The FAA also argues that each airport is different and therefore it should not be held to a consistent set of standards or guidelines in its analysis. This is both wrong and irresponsible.

133. Campbell-Hill agrees that airlines use DEN and DFW to connect passengers instead of using O'Hare. ORD also competes with STL, HOU, ATL, KCI, PIT, CVG, CLT, DTW, IAH, MSP, SLC, and others for domestic traffic; and with SFO, LAX, DFW, IAH, ATL, EWR, JFK, IAD, BOS, YYZ, and others for international traffic. Campbell-Hill discussed this in Chapter 4 of its April 6 report. The FAA never quantifies or offers an opinion on how many connecting passengers, flights, or breadth of services comprise the "critical mass" necessary for ORD hub carriers to compete with hub carriers at other airports (some of which are the same). As shown in Campbell-Hill's analysis, even shifting all future unconstrained passengers that cannot be accommodated under a constrained ORD to other connecting hubs produces more connecting passengers at ORD than ORD has today (Exhibit 403). ORD's hub viability would not be diminished. In fact, the FAA offers no analysis whatsoever to demonstrate that a reduction in ORD's connecting ratio (not absolute numbers of passengers) will weaken its service pattern or competitive viability.

134. Furthermore, ORD could serve as a major international gateway, even it was considerably smaller than it is today. JFK, which is significantly smaller than ORD in terms of both roundtrip domestic O&D (8.1 million vs. 13.1 million) and total enplanements (18.6 million vs. 36.0 million), has 73% more international enplanements (8.6 million vs. 5.0 million) and 76% more roundtrip international O&D (2.8 million vs. 1.6 million) than ORD.

135. Finally, the request of the sponsor should not affect whether the FAA adequately and responsibly evaluates alternatives, assesses financial feasibility, and determines environmental impacts. The FAA performed no analysis to support the claim by the City that... "it would be necessary to increase capacity at O'Hare to meet regional demand needs." (Comment 138). The illogic of this statement is emphasized by the facts a) that Chicago cannot assemble the financing for full build OMP-Master Plan and that b) full build OMP-Master Plan falls far short of meeting regional demand and c) that FAA has not challenged the assertion by the impacted communities that far more capacity can be built at far less cost at other locations in the metropolitan Chicago region. FAA's failure to take a

regional approach in the Chicago metropolitan region — as contrasted with the regional multi airport approach taken by FAA in the Los Angeles and Boston — is simply irrational. Indeed, FAA's failure to examine regional demand and the impact of that demand on the capacity shortcomings of full build OMP-Master Plan is heightened by the FAA's statement that Midway will soon be out of capacity. FAA's FEIS ignores the impact of Midway's unmet demand growth on the full build OMP-Master Plan proposal.

XVII. Chances of a Fourth Airport Accommodating Regional Demand

136. **FAA Assertion** "There is no current example in the United States for a region to be served by more than three airports each with a significant (10 percent or greater) market share. From this data, it is not reasonable to conclude that the Chicago area could be served by more than three airports, with each having 10 percent or more of the regional demand." (3-20)

137. **Campbell-Hill Response.** : The FAA has no basis for this comment. Chicago is the third largest air travel market in the U.S. As traffic grows in large markets like Chicago it is likely that existing airports will run out of capacity and alternative airports will be needed and could actually have four airports with more than 10 percent of the regional traffic. The reason that no market has more than 3 airports with more than 10 percent of the regional traffic could simply be because no market is currently large enough. Moreover, the choice of a self-serving hypothetical criterion like "10 percent" is of no significance. The fact is that multiple-airport hub regions like Los Angeles, San Francisco, Washington/Baltimore, New York, and Chicago do support multiple numbers of growing airports. In fact, the Los Angeles region supports five significant air carrier airports.

XVIII Capitalized Interest Issues

138. **FAA Assertion.** FAA asserts that Capitalized Interest should not be added into the capital costs of the project because it is a financing cost. To add it in would be

double counting since the FAA considered capitalized interest in its financing plan (Comments 96 and 97).

139. **Campbell-Hill Response.** Throughout this discussion and in Section 3.0 of Campbell-Hill's report dated April 6, 2005, the term "capitalized interest" refers to interest paid on construction related loans during the period of construction and prior to project completion. Campbell-Hill has stated that capitalized interest is a project capital cost and should be incorporated as part of the total capital cost considered by the FAA in its assessment of financial feasibility and financeability (C-H Report, page 55).

140. Capitalized interest is part of the cost of acquiring an asset and bringing it available for use, and therefore, is a project capital cost. The capitalization of interest cost only occurs during the construction period. After this, the interest is treated as an operating expense. The Financial Accounting Standards Board (FASB) policy does not treat capitalized interest as an interest expense on debt, but adds the amount of capitalized interest to the cost of the asset in question. From an accounting perspective, capitalized interest is treated the same as concrete used to build a runway. The following quotations from an FASB policy document explain the proper treatment of capitalized interest:

"The historical cost of acquiring an asset includes the costs necessarily incurred to bring it to the condition and location necessary for its intended use. If an asset requires a period of time in which to carry out the activities necessary to bring it to that condition and location, the interest cost incurred during that period as a result of expenditures for the asset is a part of the historical **cost of acquiring the asset**.³" (emphasis supplied)

"The objectives of capitalizing interest are (a) to obtain a measure of acquisition cost that more closely reflects the enterprise's total investment in the asset and (b) to charge a cost **that relates to the acquisition of a resource that will benefit future periods against the revenues of the periods benefited**.
"(emphasis supplied)

³ Financial Accounting Standards Board, Statement of Financial Accounting Standards No. 34: Capitalization of Interest Cost, page 5, October 1979.

"On the premise that the historical cost of acquiring an asset should include all costs necessarily incurred to bring it to the condition and location necessary for its intended use, the Board concluded that, in principle, **the cost incurred in financing expenditures for an asset during a required construction or development period is itself a part of the asset's historical acquisition cost.** " (emphasis supplied)

141. Using the term capitalized interest infers that the interest is a capital cost. Capitalization is defined as..."the process of accumulating cost in an asset account until the item is used to produce revenue." Simply using the term "capitalized interest" implies that this interest cost is part of the cost of an asset, not merely a financing cost.

142. Another important point is that if the cost of interest incurred during construction is not added to the project cost, it is not in the airline rates and charges base, and therefore, it will never be paid by the airlines. While the FAA admits on page U.4-563 that its own policy prohibits an airport from assessing interest expense on construction loans prior to a project's completion, it naively goes on to say, however, that nothing would preclude such charges if the airlines agreed to it in their rates and charges agreement. This weak response is without merit as the FAA did not provide a single example of an airport where the airlines willingly pay for construction loan interest (during construction) out of the goodness of their hearts. If this interest cost is not capitalized, the airport cannot recover it through future rates and charges.

143. Campbell-Hill's treatment of capitalized interest does not double count any expenditures. Campbell-Hill correctly divided the interest into two pools: (1) payments during project construction, and (2) payments after project completion. The payments required to be made during construction were "capitalized," that is, they were added to the capital cost of the project itself. The payments made after the project is completed and available for use were treated by Campbell-Hill as ordinary interest "expense" (a financing cost). This is consistent with FASB accounting standards.

144. In the FAA's tortured effort to minimize the total "capital" cost of the OMP it argues against a well-established accounting principal and asserts that interest expense during construction should not be capitalized (for unstated reasons) and therefore it is not a relevant cost for feasibility or benefit/cost analysis purposes. The City and the FAA attempt to invent new accounting conventions in their efforts to minimize the true OMP capital costs.

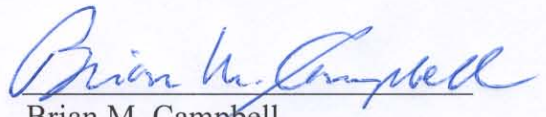
145. Campbell-Hill's analysis does not double count anything because the City never included interest cost during construction in its capital cost base any more than it included a portion of Mayor Daley's salary. The FAA's logic is totally flawed; its research of the City's cost figures leads to false conclusions or assumptions, and it demonstrates a complete ignorance of generally accepted accounting principles and standards.

146. **FAA Assertion** Capitalized interest does not accumulate on PFC bonds because the City is receiving PFC revenue even during the construction period (Comments 97 and 107).

147. **Campbell-Hill Response.** The forecast PFC revenue will not be sufficient to cover the PFC-backed debt and Pay As You Go financing in the City's financing plan. During the construction period, this PFC shortfall will have to be funded by issuing GARBs because the airlines do not pay until the runways/terminals are available for their use. The interest on these additional GARBs during the construction period must be capitalized and added to the total construction cost (C-H Report, pages 55 and 58).

148. Campbell-Hill never calculated capitalized interest on PFC-backed bonds. As described above, the capitalized interest was calculated for the GARBs that would be issued to pay for the shortfall in PFC revenue. Campbell-Hill's analysis is correct.

I declare under penalty of perjury that the foregoing is true and correct.


Brian M. Campbell

SUBSCRIBED and SWORN TO before
me this 6th day of September, 2005

Kathy A. Fedarko Notary Public

my commission expires 8/31/2007

